

Joe Manchin III Governor Stephanie R. Timmermeyer Cabinet Secretary

Permit to Operate



Pursuant to

Title Vof the Clean Air Act

Issued to:

West Virginia Alloy, Inc. and

West Virginia Environmental Services, Inc.

Alloy, West Virginia

R30-01900001-2006

R30-01900092-2006

John A. Benedict Director

Issued: January 4, 2006 • Effective: January 18, 2006 Expiration: January 4, 2011 • Renewal: July 4, 2010 Permit Number: R30-01900001-2006 and R30-01900092-2006

Permittee: West Virginia Alloy, Inc. and West Virginia Environmental Services, Inc. Facility Name: West Virginia Alloy, Inc. and West Virginia Environmental Services, Inc.

Mailing Address: P. O. Box 158613, Route 60 East, Alloy, WV 25002

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Alloy, Fayette County, West Virginia

Mailing Address: P. O. Box 158613, Route 60, East, Alloy, WV 25002-0613

Telephone Number: (304) 779-3200

Type of Business Entity: Company

Facility Description: Ferroalloy Manufacture

SIC Codes: 3313 Primary; 4911 Secondary; NA Tertiary

UTM Coordinates: 4220.96 km Easting • 476.01 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0. Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device				
	Boiler (Building 51 and 51A) and Coal Handling (Buildings 31, 32, 33, 34) Group 001								
001-06	Stack 005	Boiler 4	Installed in 07/01/1950	Design Capacity - 581.8 MMBtu/hr	Electrostatic Precipitator				
		Manufacturer: Riley Baden Stoker Corpartion	Reworked because of a fire in	Allowable Limits - Max. Coal 224,957 TPY	•				
		Model: Not Known	1982 Low-NO _x Burners	Burns 25.68 tons of coal / hour					
		Serial: W – 03267 - W	Installed (11-7-03)	SO ₂ Without CEMs: 24.49 TPH of					
		Primary Fuel: Coal	(, , , , ,	SO ₂ With CEMs: 25.68 TPH					
		Secondary Fuel: None		Sulfur Content of Coal: 1.0%					
		Start-Up Fuel: Natural Gas							
		Design Output: 581.8 MMBtu/hr							
		Steam Output: 475,000 lb/hr							
		Pulverized Wet Bottom							
0004	Stack 005	Electrostatic Precipitator No. 4	3/15/1971	Nominal Capacity - 240,000 cfm @ 33.0 °F	Not				
		Manufacturer: Western Precipitator Division of Joy Manufacturing			Applicable				
		Model No.: Not Known			ļ				
		Serial No.: Contract No. 70-078							
		Type: Minimum of 99.3 % PM&Lead is removed							
		Number of Chambers: 8							
		Number of Fields: 4							
		Collection Plate Area: 77,7760 sq ft							
		Gas Coniditioning: Sulfur Trioxide Gas Injection							
001-01	Fugitive	Coal Storage Pile	Not Applicable	Not Applicable	None				
			Applicable						

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
001-02	Fugitive and Fugitives from Building	Coal Handling Facility Consist of: Vibrating Coal Hopper Manufacturer: United Conveyor No. 1 Coal Belt (95" X 3") Primary Coal Crusher No. 2 Coal Belt(716" X 3") Secondary Coal Crusher No. 3 Coal Belt(480" X 3") No. 4 Coal Belt(116" X 3") Coal Distribution Car Drag Link Coal Storage Bunkers (Bldg 51A) #4 Bunker Area: 884 ft²	7/1/1955	Nominal Capacity - 42.5 tons/hr	Building Control and Covered Belts
001-07	Fugitive	#4 Bunker Height: 30 feet Fly Ash Handling (Conveyor Bldg 34) from Electrostatic Precipitator to Fly Ash Silo (Bldg 51) and Wastewater from Water Spray 0020 Manufacturer: United Conveyor	1/7/1972	Nominal Capacity - 25.0 tons/hr	Bag Filter, Enclosed Conveyor and Water Spray
001-08	Water Spray and Fugitive	Fly Ash Silo Unloading to Wastewater from Water Spray and to Truck for West Virginia Environmental Services, Inc. (WVES) Landfill	1/7/1972	Nominal Capacity - 25.0 tons/hr	Water Spray (0020)
001-08	Fugitive	Ash Settling Ponds from Fly Ash Handling and (Boiler 4) Water Sluice Bottom Ash to Truck for WVES Landfill	1/7/1972	None Applicable	Work Practice (wet handling method)
		Sulfur Trioxide System for	Boiler 4		
001	Stack 005 and Fugitive	Sulfur Trioxide System for Boiler 4 consists of: SO ₂ Cylinder Storage SO ₂ Cylinder to Vaporizer Tank Vaporizer Tank to Air Heater Air Heater to SO ₂ / SO ₃ Converter SO ₃ Spray to Electrostatic Precipitator 4	1970's	Nominal Capacity: 2,000 lb SO ₂ Cylinder 10 psig @ 37 °F	Electrostatic Precipitator
		Raw Material Stock Piles G	roup 002		
002-05	Fugitive	Raw Material Storage Piles	None Applicable	Nominal Capacity: 7 acres	None
		C6M Mix System (Buildings 20C,	20D) Group	002	
002-06	Stack 008 and Fugitives From Building	C6M Mix System consists of: System Manufacturer: Jeffrey Unloading Pit Conveyor Elevator Bin 1 Bin 2 Bin 3 Bin 4 Conveyor Loading Station	7/1/1941	Nominal Capacity: 1. 16.6 tons/hr	Baghouse 34 (0014) and Building Control

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
0014	Stack 008	Baghouse 34 (0014) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 6 Total Cloth Area: 55,731 ft2 Type: Continuous Cleaning Cycle: Shaker Type of Filter: Dacron Bags	7/1/1972	Design Capacity: 99,360 CFM @ 90 °F	Not Applicable
		Min Collection Eff: 99%			
Mix l	Deliver System (B	uilding10B) and C3M Furnace Mix S	ystem (Build	ings 10, 10A, 21) Group	p 002
002-07	Fugitives	Mix Delivery System to C3M Furnace Mix System to Furnaces 3, 6, 7, 9, 14, 15, and 16	Installed 4/1/1996	Nominal Capacity: 300 tons/hr	Building Control/ Covered Conveyors
002.07		Mix Deliver System consists of: Railcar Unloading to Unloading Unloading Bin #1 and Unloading Bin #2 Unloading Bin #1 to Apron Conveyor #1 Unloading Bin #2 to Apron Conveyor #2 Apron Conveyors #1 and #2 to 48" Pocket Belt #1 48" Pocket Belt #1 to 36" By Pass Conveyor and Inclined Screen 36" in By Pass Conveyor to 36 " Fines Conveyor and 48" Pocket Belt #8 36" Fines Conveyor to Fines Bin Coal and Fines Bin Sand Fines Bin Coal and Fines Bin Sand to Fines Bin Loadout Inclined Screen to 36" Fines Conveyor (See Above Loop) and 48" Pocket Belt #8 48" Pocket Belt #8 to C3M Furnace Mix System		N. L. G.	
002-07	Fugitives From Building	C3M Furnace Mix System consists of: From 48" Pocket Belt #8 to 36" Reversible Shuttle Conveyor #10 36" Reversible Shuttle Conveyor #10 to 48" Reversible Distributing Conveyor #12, Bin 309, Bin 310, Bin 311, and 36" North Feed Conveyor #13 48" Reversible Distributing Conveyor #12 to Bin 401, Bin 402, Bin 304, Bin 305, Bin 302&303, Bin 306&307, Bin 301, and Bin 308 Bin 401 to 36" Apron Conveyor #20 36" Apron Conveyor #20 to Weigh Hopper	Installed 7/1/1935 Modified 7/1/1998	Nominal Capacity: 90 tons/hr	Building Control

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
		Bin 402 to 36" Apron Conveyor #21 36" Apron Conveyor #21 to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 30" Reversible Conveyor #1 Bin 301 to 30" Apron Feeder 30" Apron Feeder to Weigh Hopper Bin 308 to 30" Apron Feeder 30" Apron Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 30" Reversible Conveyor #1 30" Reversible Conveyor #1 to 36" Conveyor #2a 36" Conveyor #2a to 36" Conveyor #3a 36" Conveyor #3a to Weigh Hopper 8F Weigh Hopper 8F to Skip Hoist Skip Hoist to 8F Tram Cars 8F Tram Cars to Furnace 14 Bins, Furnace 15 Bins, and Furnace 16 Bins Furnace 15 Bins to Furnace 15 Furnace 16 Bins to Furnace 15 Furnace 16 Bins to Furnace 16 30" Reversible Conveyor #1 to 36" Conveyor #2 36" Conveyor #2 to Weigh Hopper 3F Bin 309 to 30" Apron Conveyor #23 30" Apron Conveyor #23 to Weigh Hopper Weigh Hopper to 30" Belt Feeder 30" Belt Feeder to 36" Conveyor #3 Bin 310 to Vibrating Feeder Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to Weigh Hopper	Installed, Modified,	Nominal Capacity	
		Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 36" Conveyor #3 Bin 311 to 30" Apron Conveyor #22 Apron Conveyor #22 to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 36" Conveyor #3 36" Conveyor #3 to Weigh Hopper 3 3F 36" North Feed Conveyor #13 to 36"Reversible Conveyor #14			

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
		36" Reversible Conveyor #14 to Bin 312&313, Bin 314, Bin 315&316 and 317&318, Bin 319&320, and Reject Chute Bin 312&313 to 36" Apron Conveyor #312&313 36" Apron Conveyor #312&313 to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 42" North Batching Conveyor Bin 314 to 36" Apron Reversible Conveyor #314 and Scale Car 36 "Apron Reversible Conveyor #314 to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 42" North Batching Conveyor Bin 315&316 and 317&318 to Vibrating Feeder and Scale Car Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 42" North Batching Conveyor Bin 319&320 to Vibrating Feeder and Scale Car Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to Weigh Hopper Weigh Hopper to Vibrating Feeder Vibrating Feeder to 42" North Batching Conveyor 42" North Batching Conveyor to 36" North Cross Conveyor to 36" North 3F Weigh Hopper Conveyor 36" North 3F Weigh Hopper		or Allowable Limits	
		Conveyor to Weigh Hopper 3F Scale Car to Weigh Hopper 3F and Furnace 9 Skip Hoist Weigh Hopper 3F to Skip Hoist Skip Hoist to 3F Tram Cars			
002-07	Fugitives From Building	3F Tram Cars to Furnace 3 Bins, Furnace 6 Bins, and Furnace 7 Bins Furnace 3 Bins to Furnace 3 Conveyors and Furnace 3 Furnace 3 Conveyors to Furnace 3 Furnace 6 Bins to Furnace 6 Furnace 7 Bins to Furnace 7 Furnace 9 Skip Hoist to Furnace 9 Tram Car	Installed 7/1/1935		Building Control
002-07	Fugitives From Building	Furnace 9 Tram Car to Furnace 9 Bins Furnace 9 Bins to Furnace 9	Installed 7/1/1935		Building Control

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
	Submerged	Electric Arc Furnace Number 3 (Furi	nace 3) in Bui	ilding 5 Group 003	
003-01	Stacks 009 and Fugitives From Building	Submerged Electric Arc Furnace and Tapping to Air Heat Exchanger Manufacturer: UCC/Demag	7/1/1972	Nominal Capacity: 2.6 tons/hr	Baghouse / Building Control
006-01	Fugitive	Cooling Tower from Furnace 3	7/1/1973	Design Capacity:	None
		Manufacturer: Ecodyne Corp.		900 gal/min	
003-01	Stack 009	From Furnace 3 and Tapping to Air Heat Exchanger to Baghouse 3 (0005)	Not Applicable	None Applicable	Baghouse 3 (0005)
003-01	Fugitives From Building	Tapping from Furnace 3, Metal Pouring (003-09), Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.9 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.9 tons/hr	Work Practices/ Building Control
005-01	Fugitives From Building	Slag Handling (005-01), Metal Pouring (003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.3 ton/hr	Work Practices/ Building Control
0005	Stack 009	Air Heat Exchanger to Baghouse 3 (0005) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 12 Total Cloth Area: 155,520 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1974 Modified 10/1/99 Reverse Air	Design Capacity: 532,696 CFM @ 280 °F	NOTE: Fume (PM from Furnace 3) goes to Alloy Facility's Microsilica Facility and /or WVES Landfill
004-09	Fugitive	Baghouse 3 (0005) Dust Handling to Silo 7 to Slurry Truck (0021) and Fumes to Sales	7/1/1974	Nominal Capacity: 1.25 tons/hr	None
004-09 S7	Fugitive	Silo 7	7/1/1974	Design Capacity: 8,000 ft ³	Baghouse
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
004-09 S14	<u>Stack 016;</u> <u>Stack 017</u>	Silo 14 w/ Densification	Modified 8/1/2006	Design Capacity: 9,800 ft ³	Baghouse 14 (0012) & 15 (0013)
Apollo 13	Stack 016; Stack 017	Apollo 13 Bagging Unit	<u>8/1/2006</u>	Four (4) Tons	Baghouse 14 (0012) & 15 (0013)
Bulk Truck Loading	Stack 016; Stack 017	Bulk Truck Loading	8/1/2006	<u>NA</u>	Baghouse 14 (0012) & 15 (0013)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
	Submerged	Electric Arc Furnace Number 6 (Fur	nace 6) (Build	ding 5) Group 003	
003-03	Stacks 010, 011, 012, and Fugitives From Building	Submerged Electric Arc Furnace 6 to Tapping	7/1/1935	Nominal Capacity: 2.0 tons/hr	Baghouses
003-03	Stacks 010, 011, 012, and Fugitives From Building	Tapping from Furnace 6, Metal Pouring (003-09), and Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices / Building Control
005-01	Fugitive and Fugitives From Building	Slag Handling (003-09), Metal Pouring (005-01), Slag Sales	Not Applicable	Nominal Capacity: 0.2 ton/hr	Work Practices/ Building Control
004-09	Fugitive	Baghouses 5 (0006), 6 (0007), 7A (0008) Dust Handling to Silo 7, Slurry Truck (0021) and Fume to Sales	7/1/1964	Nominal Capacity: 2.25 tons/hr	None
004-09 S7	Fugitive	Silo 7	7/1/1974	Design Capacity: 8,000 ft ³	Baghouse
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
	Submerged 1	Electric Arc Furnace Numbers 7 (Fur	nace 7) (Buil	ding 5) Group 003	
003-04	Stacks 010, 011, 012, and Fugitives From Building	Submerged Electric Arc Furnace 7 to Tapping	7/1/1935	Nominal Capacity: 2.0 tons/hr	Baghouses 5 - (0006), 6 - (0007), 7A - (0008)
003-04	Stacks 010, 011, 012, and Fugitives From Building	Tapping from Furnace 7, Metal Pouring (003-09), and Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
005-01	Fugitive and Fugitives From Building	Slag Handling (005-01), Metal Pouring (003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.2 ton/hr	Work Practices/ Building Control
004-09	Fugitive	Baghouses 5 (0006), 6 (0007), 7A (0008), Dust Handling to Silo 7 to Slurry Truck (0021) and Fume to Sales	7/1/1964	Nominal capacity: 2.25 tons/hr	None
004-09 S7	Fugitive	Silo 7	7/1/1974	Design Capacity: 8,000 ft ³	Baghouse
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
	Baghouses	for Submerged Electric Arc Furnace	Numbers 6	& 7 – Group 003	
0006	Stack 010	Baghouse 5 (0006) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 10 Total Cloth Area: 129,600 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1964 Modified 7/1/99 Reverse Air	Design Capacity: 320,000 CFM @ 360 °F	NOTE: Fume goes to Alloy Facility's Microsilica Facility and /or WVES Landfill
0007	Stack 011	Baghouse 6 (0007) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 10 Total Cloth Area: 129,600 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1973 Modified 4/1/99 Reverse Air	Design Capacity: 320,000 CFM @ 360 °F	NOTE: Fume goes to Alloy Facility's Microsilica Facility and /or Landfill
0008	Stack 012	Baghouse 7A (0008) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 10 Total Cloth Area: 129,600 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1970 Modified 4/1/2000 Reverse Air	Design Capacity: 320,000 CFM @ 360 °F	NOTE: Fume goes to Alloy Facility's Microsilica Facility and /or WVES Landfill
	Submerged I	Electric Arc Furnace Number 9 (Furn	nace 9) (Build	ing 15) Group 003	
003-05	Stacks 015, 029, and Fugitives From Building	Submerged Electric Arc Furnace 9 to Tapping	7/1/1971	Nominal Capacity: 2.6 tons/hr	Baghouses 9 (0011) and 12 (0024)
003-05	Stacks 015, 029, and Fugitives From Building	Tapping from Furnace 9 to Metal Pouring (003-09), and Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.6 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.6 tons/hr	Work Practices/ Building Control
005-01	Fugitive and Fugitives From Building	Slag Handling (005-01), Metal Pouring 9003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.3 ton/hr	Work Practices

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
0011	Stack 015	Baghouse 9 (0011) to Baghouse Dust Handling (004-09) Building 70 Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 10 Total Cloth Area: 129,600 ft2 Type: Continuous Cleaning Cycle: Shaker Type of Filter: Nomex Bags Min Collection Eff: 97%	7/1/1972	Design Capacity: 240,000 CFM @ 375 °F	NOTE: Fume goes to WVES Landfill and/or Truck to Fume Sales
0024	Stack 029	Baghouse 12 (0024) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 8 Total Cloth Area: 103,680 ft2 Type: Continuous Cleaning Cycle: Shaker Type of Filter: Nomex Bags Min Collection Eff: 97%	7/1/1969	Design Capacity: 200,000 CFM @ 375°F	NOTE: Fume goes to WVES Landfill and/or Truck to Fume Sales
004-09	Fugitive	Baghouses 9 (0011) and 12 (0024) Dust Handling to Slurry Truck (0021) and Fume to Sales	7/1/1972	Nominal Capacity: 1.5 tons/hr	None
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
	Submerged El	ectric Arc Furnace Number 14 (Furn	ace 14) (Buil	ding 19) Group 003	
003-06	Stacks 016, 017, and Fugitives From Building	Submerged Electric Arc Furnace 14 and Tapping to Air Heat Exchanger(s)	Installed 7/1/1941 Modified 11/1/02 New Electrode System Design	Nominal Capacity: 2.0 tons/hr	Baghouse 14 (0012) and 15 (0013)
003-06	Stack 016	Furnace 14 and Tapping to Air Heat Exchanger to Baghouse 0012 (0024)	Not Applicable	None Applicable	Baghouse 14 (0012)
003-06	Stack 017	Furnace 14 and Tapping to Air Heat Exchanger to Baghouse 14 (0013)	Not Applicable	None Applicable	Baghouse 15 (0013)
003-06	Stacks 016 and/or 017, and Fugitives From Building	Tapping from Furnace 14 to Metal Pouring (003-09) and Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
005-01	Fugitive and Fugitives From Building	Slag Handling (005-01), Metal Pouring (003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.2 ton/hr	Work Practices
004-09	Fugitive	Baghouse 14 (0012) and/or Baghouse 15 (0013) Dust Handling to Silo 14 to Slurry Truck (0021) and Silo 7 to Fume to Sales	Not Applicable	Nominal Capacity: 0.75 ton/hr each	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
004-09 S14	Fugitive Stack 016; Stack 017	Silo 14 with Densification	7/1/1974	Design Capacity: 9,800 ft ³	Baghouse <u>14</u> (0012) & <u>15</u> (0013)
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
Apollo 13	Stack 016; Stack 017	Apollo 13 Bagging Unit	8/1/2006	Four (4) Tons	Baghouse 14 (0012) & 15 (0013)
Bulk Truck Loading	Stack 016; Stack 017	Bulk Truck Loading	8/1/2006	<u>NA</u>	Baghouse 14 (0012) & 15 (0013)
	G 1 151	<u> </u>	15) (D 1	10, 0 002	
		ectric Arc Furnace Number 15 (Furn		<u> </u>	D 1
003-07	Stacks 016, 017, and Fugitives From Building	Submerged Electric Arc Furnace 15 to Tapping and Air Exchanger(s)	Installed 7/1/1941 Modified 7/15/1998 Increased Capacity	Allowable Limits: 18,000 TPY Nominal Capacity: 2.0 tons/hr	Baghouses
003-06	Stack 016	Furnace 15 and Tapping to Air Heat Exchanger to Baghouse 14 (0012)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Baghouse 14 (0012)
003-06	Stack 017	Furnace 15 and Tapping to Air Heat Exchanger to Baghouse 15 (0013)	Not Applicable	None Applicable	Baghouse 15 (0013)
003-07	Stacks 016 and/or 017, and Fugitives From Building	Tapping Furnace 15, Metal Pouring (003-09), Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 2.0 tons/hr	Work Practices/ Building Control
005-01	Fugitive and Fugitives From Building	Slag Handling (005-01), Metal Pouring (003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.2 ton/hr	Work Practices/ Building Control
004-09	Fugitives	Baghouse 14 (0012) and/or Baghouse 15 (0013) Dust Handling to Silo 14 to Slurry Truck (0021) and Silo 7 to Fume to Sales	Not Applicable	Nominal Capacity: 0.75 ton/hr each	None
004-09 S14	Fugitive Stack 016; Stack 017	Silo 14 with Densification	7/1/1974	Design Capacity: 9,800 ft ³	Baghouse <u>14</u> (0012) & 15 (0013)
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
Apollo 13	Stack 016; Stack 017	Apollo 13 Bagging Unit	8/1/2006	Four (4) Tons	Baghouse 14 (0012) & 15 (0013)
Bulk Truck Loading	<u>Stack 016;</u> <u>Stack 017</u>	Bulk Truck Loading	8/1/2006	<u>NA</u>	Baghouse 14 (0012) & 15 (0013)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
	Submerged El	ectric Arc Furnace Numbers 16 (Fur	nace 16) (Bui	lding 19) Group 003	
003-08	Stacks 016, 017, and Fugitives From Building	Submerged Electric Arc Furnace 16 to Tapping and Air Exchanger(s)	7/1/1941	Nominal Capacity: 0.6 tons/hr	Baghouses
003-06	Stack 016	Air Heat Exchanger to Baghouse 12 (0024)	Not Applicable	None Applicable	Baghouse 12 (0024)
003-06	Stack 017	Air Heat Exchanger to Baghouse 15 (0013)	Not Applicable	None Applicable	Baghouse 15 (0013)
003-08	Stacks 016 and/or 017, and Fugitives From Building	Tapping Furnace 16, Metal Pouring (003-090), Slag Handling (005-01)	Not Applicable	Nominal Capacity: 0.6 ton/hr	Work Practices/ Building Control
003-09	Fugitives From Building	Metal Pouring (003-09), Tapping, Slag Handling (005-01)	Not Applicable	Nominal Capacity: 0.6 ton/hr	Work Practices/ Building Control
005-01	Fugitives From Building	Slag Handling (005-01), Metal Pouring (003-09), Slag Sales	Not Applicable	Nominal Capacity: 0.06 ton/hr	Work Practices/ Building Control
004-09	Fugitive	Baghouse 14 (0012) and/or Baghouse 15 (0013) Dust Handling to Silo 14 to Slurry Truck (0021) and Silo 7 to Fumes to Sales	Not Applicable	Nominal Capacity: 0.75 ton/hr each	None
004-09 S14	Fugitive	Silo 14	7/1/1974	Design Capacity: 9,800 ft ³	Baghouse
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
	Baghou	ses for Submerged Electric Arc Furn	aces 14, 15, 1	6 - Group 003	
0012	Stack 016	Heat Exchanger to Baghouse 14 (0012) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 12 Total Cloth Area: 155,520 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1974 Modified 7/1/98	Design Capacity: 451,454 CFM @ 360 °F	NOTE: Fume goes to Alloy Facility's Microsilica Facility and /or WVES Landfill
0013	Stack 017	Heat Exchanger to Baghouse 15 (0013) to Baghouse Dust Handling (004-09) Manufacturer: Wheelabrator Model No.: High Temperature, Structural Compartments: 12 Total Cloth Area: 155,520 ft2 Type: Continuous Cleaning Cycle: Reverse Air Type of Filter: Glass Membrane Min Collection Eff: 97%	Installed 7/1/1974 Modified 4/1/98	Design Capacity: 451,454 CFM @ 360 °F	NOTE: Fume goes to Alloy Facility's Microsilica Facility and /or WVES Landfill

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
004-09	Fugitive	Baghouse 14 (0012) and/or Baghouse15 (0013) Dust Handling (004-09) to Silo 14 to Slurry Truck (0021) and Silo 7 to Fume to Sales	Not Applicable	Nominal Capacity: 0.75 ton/hr each	None
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
	C7P Im	pactor and Baghouse Dust Handling	(Building 15.	A) Group 004	
004	Fugitive	Product Storage to Product Loading (004-08)	Not Applicable	None Applicable	None
004-02	Stack 022 and Fugitives From Building	C7P Impactor (004-02), Bin and Conveyor System, and Baghouse Dust Handling (004-09) consists of: System Manufacturer: Pennsylvania Impactor Feed Bin to Vibratory Feeder Vibratory Feeder To Elevator Elevator to Screen Box 1 Screen Box 1 to Screen Box 2 Screen Box 2 to Impactor Hammer Mill and Product Storage Piles (004- 10) Impactor Hammer Mill to Elevator Model No.: C-5-35 Bin 1 to Conveyor 1 Bin 2 to Conveyor 2 Conveyor 3 and Conveyor 2 to Conveyor 3 Conveyor 3 to Product Loading (004-08)	7/1/1941	Design Capacity: 1.5 tons/hr	Baghouse
004-10	Fugitives From Building	Product Storage Piles to Product Loading (004-08)	7/1/1941	None Applicable	Building Control
004-08	Fugitive and Fugitives From Building	Product Loading	7/1/1941	None Applicable	Building Control
0017	Stack 022	C7P Impactor Baghouse (0017) to Baghouse Dust Handling (004-09); Buildings 60 and 61 System Manufacturer: Fuller Model No.: Plenum Pulse Compartments: 4 Total Cloth Area: 2,009 ft2 Type: Continuous Cleaning Cycle: Pulse Air Type of Filter: Fabric Min Collection Eff: 99% Low Temperature	7/1/1991	Design Capacity: 12,000 CMF @ 90 °F	NOTE: Dust Packaged for Sales and/or WVES Landfill
004-09	Fugitive	Dust Collector C7P Impactor Dust Handling (004-09) to Slurry Truck (0021) and Dust to Sales	Not Applicable	None Applicable	None
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device				
	C7P Multi-Stage Crusher (Building 15A) Group 004								
004-03	Stacks 023 and Fugitives From Building Stacks 024 and Fugitives From Print Pr	C7P Multi-Stage Crusher consists of: Feed Hooper to Armored Feeder Model No.: C-5-35 Armored Feeder to Belt Conveyor Belt Conveyor to Jaw Crusher Jaw Crusher to Vibratory Feeder 1 Manufacturer: Traylor Type: HB 30" X 42" Vibratory Feeder 1 to Pocket Belt Pocket Belt to Chute Chute from Pocket Belt to 48" Crusher	Installed 7/1/1936 Modified 10/1/2003 Replaced Vibratory Feeder with Conveyor	Design Capacity: 50 tons/hr	Baghouse/ Building Control Baghouse/ Building				
	Building	48" Crusher to 2 X 10 Belt Manufacturer: Telesmith: Baber- Green Type: 48" Gyrator 2 X 10 Belt to #1 Bucket Elevator #1 Bucket Elevator to #1 Screen Box #1 Screen Box to Floor Skips and to 36" Crusher and to Conveyor Floor Skips 36" Crusher to Recycle Belt Manufacturer: Telesmith: Baber- Green Type: Grasphere Recycle Belt to #3 Bucket Elevator #3 Bucket Elevator to #2 Screen #2 Screen to Floor Skips and Car Loading Belt Floor Skips Car Loading Belt to Product Loading (004-08)and Product Storage Piles (004-10) Conveyor to Flop Gate Flop Gate to Floor Skips and Car Loading Belt Floor Skips Car Loading Belt to Product Loading (004-08) and Product Storage Piles (004-10) Car Loading Belt to Product Loading (004-08) and Product Storage Piles (004-10)			Control				
004-08	Stacks 024, Fugitives, and Fugitives From Building	Product Loading	Not Applicable	None Applicable	Baghouse/ Building Control				
004-10	Fugitive and Fugitives From Building	Product Storage Piles to Product Loading (004-08) and C7P Fines Screener NOTE: C7P Fines Screener is a portable conveyor used in C7P beginning in 2002 for product loading into trucks.	Not Applicable	None Applicable	Building Control for Inside Product Storage and Loading				

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
0015	Stack 023	C7P Mainline Baghouse (0015) to Baghouse Dust Handling (004-09) Manufacturer: Fuller Model No.: Plenum Pulse Compartments: 14 Total Cloth Area: 7,033 ft2 Type: Continuous Cleaning Cycle: Pulse Air Type of Filter: Fabric Min Collection Eff: 99% Low Temperature	7/1/1968	Design Capacity: 46,000 CFM @ 90 °F	NOTE: Dust Packaged for Sales and/or WVES Landfill
0016	Stack 024	C7P Load Hopper Baghouse (0016) to Baghouse Dust Handling (004-09) Manufacturer: Fuller Model No.: Plenum Pulse Compartments: 6 Total Cloth Area: 4,875 ft2 Type: Continuous Cleaning Cycle: Pulse Air Type of Filter: Fabric Min Collection Eff: 99% Low Temperature	7/1/1994	Design Capacity: 30,000 CFM @ 90 °F	NOTE: Dust Packaged for Sales and/or WVES Landfill
004-09	Fugitives	Baghouse C7P Multistage Crusher to Dust Handling to Slurry Truck (0021) and Dust to Sales	Not Applicable	None Applicable	None
0021	Fugitives	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
		C6F Sizing and Cleaning (Building	g 20) Group (004	
004	Sack 021	Product Storage to Product Loading	Not Applicable	None Applicable	Building Control
004-04	Stacks 008 and Fugitives From Building	C6F Sizing and Cleaning consists of: Manufacturer: Eliptex and Hewitt- Robins Feed Bin to Conveyor Conveyor to "A" Table "A" Table to "C" Table Model No.: 36-188 "B" Table to Product loading (004- 08) Model No.: 228 "C" Table to Table "B" Model No.: 176	7/1/1939	Design Capacity: 12.5 tons/hr	Baghouse/ Building Control
004-08	Fugitives From Building	Product Loading	Not Applicable	None Applicable	Building Control
0014	Stack 008	Baghouse 34 (0014) to Baghouse Dust Handling (004-09) (See Section 002-06 for Description)	7/1/1972	Design Capacity: 99,360 CFM @ 90 °F	Baghouse
004-09	Fugitive	Baghouse 34 (0014) to Dust Handling to Slurry Truck (0021) and Dust to Sales	Not Applicable	None Applicable	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
		C3P Multistage Crusher (Building	(5A) Group (004	
004	Fugitives From Building	Product Storage to Dump Hopper with Vibratory Feeder and Fines or Product Loading (004-08)	Not Applicable	None Applicable	Building Control
004-05	Stacks 025, Fugitive and Fugitives From Building	C3P Multistage Crusher consists of: Dump Hopper with Vibratory Feeder to Belt Conveyor 1 Belt Conveyor 1 to 36" Jaw Crusher 36" Jaw Crusher to Belt Conveyor 2 Manufacturer: Birdsboro Belt Conveyor 2 to Screen Box Screen Box to 36" Gyro Crusher and Fines 1 Loading Station (004-08) 36" Gyratory Crusher to Belt Conveyor 3 and Conveyor 4 Manufacturer: Allis Chambers Conveyor 4 to Bin 1 and Bin 2 Bin 1 and Bin 2 to Fines and Product Loading (004-08) Belt Conveyor 3 to Belt Conveyor 2 (Recycle)	Installed 7/1/1945 Modified in 2002 Bin Storage/ Conveyor / Product Loading	Design Capacity: 50 tons/hr Design Capacity: Bins 1&2: 100 ton Capacity	Wet Scrubber Baghouse
0018 <u>A</u>	Stack 025 <u>A</u>	C3P Baghouse Manufacturer: Carco-Tech Model No.: 39-15-13-111945-TWH Control Eff.: 99.9% C3P Wet Scrubber — High Efficiency Manufacturer: Western Precipitator Scrubbing Agent: Water Model No.: Turbulaire Min Collection Eff: 99%	2008 7/1/1977	60,000 CFM Design Capacity: 50,000 CFM @ 90°F	
	Fugitive	Wet Dust Unloading	Not Applicable	None Applicable	Wet Handling Method
0021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Misc. Control Device
004-08	Fugitive	Fines or Product Loading	Not Applicable	None Applicable	Building Control
		C3P Drum Packing Station (Buildin	g 5A) Group	004	
004	Fugitives From Building	Product Storage to Vibratory Feeder and Product Loading (004-08)	Not Applicable	None Applicable	Building Control
004-06	Stacks 025 and Fugitives From Building	C3P Drum Packing Station consists of: System Manufacturer: Jeffrey Dump Hopper with Vibratory Feeder to Chute Chute to Product Loading (004-08)	7/1/1932	Design Capacity: 5 tons/hr	Wet Serubber Baghouse

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
004-08	Fugitives From Building	Product Loading		None Applicable	
0018 <u>A</u>	Stack 025 <u>A</u>	C3P Wet Scrubber C3P Baghouse (Refer to Emission Unit ID 004-05)	7/1/1977 2008		
	Fugitive	-Wet Dust Unloading	Not Applicable	None Applicable	Wet Handling Method
0021	Fugitive	- Slurry Truck	Not Applicable	None Applicable	Slurry Truck Mise. Control Device
		C3P 4 x 20 Crusher (Building 5.	A) Group 004	1	
004	Fugitives From Building	Product Storage to 4 X 20 Crusher and Product Loading (004-08)	Not Applicable	None Applicable	Building Control
004-07	Stacks 025 and Fugitives From Building	C3P 4 X 20 Crusher consists of: System Manufacturer: Earle & Bacon 4 X 20 Crusher to Screen Box Screen Box to Product loading (004- 08)	7/1/1943	Design Capacity: 1.5 tons/hr	Wet Serubber Baghouse
004-08	Fugitives From Building	Product Loading	Not Applicable	None Applicable	Building Control
0018 <u>A</u>	Stack 025 <u>A</u>	(Refer to Emission Unit ID 004-05)	7/1/1977 2008		Not Applicable
	Fugitive	Wet Dust Unloading	Not Applicable	None Applicable	None
9021	Fugitive	Slurry Truck	Not Applicable	None Applicable	Slurry Truck Mise. Control Device
		Stockpiles, Roadways, and Land	fill Group 00	5	
005-01	Fugitive	Slag Handling to Slag Sales – Remelts Stockpiles from Furnace Tapping/Casting Processes	Not Applicable	None Applicable	None
005-02	Fugitive	Plant Roadways	Not Applicable	None Applicable	Sweeper Trucks
005-03	Fugitive	WVES Landfill Haulway	Not Applicable	None Applicable	None
005-04	Fugitive	WVES Landfill via Truck from Ash Settling Ponds, Fly Ash Silo Unloading, Waste Storage Piles, Baghouse Dust Handling and Other Misc. Sources	7/1/1932	None Applicable	Wet Slurry Handling Method, Wet Ash Handling Method

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
		Miscellaneous - Group	o 006		
006-01	Fugitives	Furnace 3 Cooling Tower Manufacturer: Ecodyne Corp. (Refer to Section 003-01)	7/1/1973	Design Capacity: 90 gal/min	None
006-02	Fugitives From Building	C3F Ladle Lining Pit Manufacturer: Blastcrete Corp. (Building 5) Model: 1G020 Serial No.: 98287 Dust Collector for C3F Ladle Lining Manufacturer: Donaldson Toit Built Model: 3EA-24741-00 Type: Cyclone Cleaning: Shaker mechanism into a removable canister.	3/5/1996	Design Capacity: 1.5 tons/hr	Canister Dust Collector/ Building Control
006-03	Fugitives From Building	Ladle Dig-Out Manufacturer: Kent Air Tools Model: KHB-5C Serial No.: 316HD	12/31/1992	None Applicable	Building Control
006-04	Cyclone Stack	Lab. Herzog Sample Prep. (Bldg 5B) Manufacturer: Herzog	7/1/1990	None Applicable	Cyclone
006-05	Fugitives From Building	Sample Prep. Crushing	7/1/1940	None Applicable	None
006-06	Fugitives From Building	Lance Pipes	Not Applicable	None Applicable	None
006-07	Fugitives From Building	Furnace 3 Ladle Preheater Manufacturer: Hotwork Model: HV-600-PU 251	1970's	Nominal Capacity: 4 MM Btu/hr	None
006-08	Fugitives From Building	Furnace 6 & 7 Ladle Preheater Manufacturer: Shelter and Brink Model: 94763	1970's Replaced 1995	Nominal Capacity: 6 MM Btu/hr	None
006-04	0019 Stack	Lab Herzog Cyclone Type: Simple Feed Method: Tangential Number of Units: 1	7/1/1990	None Applicable	Not Applicable
006-09	Fugitives From Building	Furnaces 14&15 Ladle Preheater Manufacturer: Shelter and Brink Model: 94763	1970's Replaced 1994	Nominal Capacity: 6 MM Btu/hr	None
006	Fugitives From Building	Carbon Paste Pan Mill Manufacturer: Stevens Pan Mill	1950	Nominal Capacity 240 TPY	None
	Ţ	Vet Slurry Microsilica Facility (Build	ding 155) Gro	up 006	
004-09 S7	Fugitive	Silo Number 7	7/1/1974	Design Capacity: 8,000 ft ³	Baghouse
MS-1	MS-1C	Wet Slurry Mixing Facility is in a Building that is Adjacent to Silo No. 7 Design Water Flow: 482 gallons per hour	10/1/1983	Allowable Limits: 10,000 TPY	Baghouse and Water Spray

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
MS-1C	MS-1E	Backup Baghouse Dust Control Device Dust is Ducted to Silo 7 Manufacturer: DCE Vokes Model No.: DLM V20/10 F5 Compartments: 1 Total Cloth Area: 215 ft² Type: Continuous Automatic Cleaning Cycle: Compressed Air Pulse Jets Type of Filter: Felt Fabric Pad Supported on a Rigid Mesh Frame or Insert that is Weather Proof and Insertable Air to Cloth Ratio: 9.3 to1 ft/min Min Collection Eff: 99%	10/1/1983	Design Capacity: 2,000 CFM @ 300 °F	Not Applicable
MS2	None	Microsilica Slurry Storage Tank Pumps to Truck Tankers and Rail Cars at Loading Stations Adjacent to MS3 and to Barges on Kanawha River Tank Type: Aboveground - Vertical Roof Type: Closed Stores: Microsilica Slurry	10/1/1983	Design Capacity: 360,000 gal	None
MS3	None	Microsilica Slurry Loading Building	8/15/1985	Design Capacity: 10,000 TPY	None
		Dry Mixing Facility (Building 15	66) Group 00	6	
004-09 (S7)	Fugitive	Silo Number 7	7/1/1974	Design Capacity: 8,000 ft ³	Baghouse
DM-1	DM-1C and Fugitive	Dry Microsilica Rotary Classifier	9/12/1989	Allowable Limits: 30,000 TPY	Baghouse
DM-1C	DM-1E and Fugitive	Dry Microsilica Rotary Classifier – Baghouse Manufacturer: Research Conttrell Flex Kleen Model No.: 100-CTWC-154 (IIIG) Compartments: 1 Total Cloth Area: 1,956 ft² Type: Continuous Automatic Cleaning Cycle: Compressed Air Pulse Jets Type of Filter: 16 oz Polyester Singed Felt, Caged Air to Cloth Ratio: 3.06 ft/min Min Collection Eff: 99%	9/12/1989	Design Capacity: 7,500 CFM @ 70 °F	Baghouse
DM-2	DM-2C and Fugitive	Dry Microsilica Building Central	9/12/1989	Design Capacity: 30,000 TPY	Baghouse

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed, Modified, Replaced	Design Capacity or Nominal Capacity or Allowable Limits	Control Device
DM-2C	DM-2E	Dry Microsilica Building Central Baghouse Filter for Bagging Operation and Control of Dust within Building an for Bulk loading Operations Manufacturer: Research Conttrell Flex Kleen Model No.: 100-WSWC-121-IIIG Compartments: 1 Total Cloth Area: 1,537 ft² Type: Continuous Automatic Cleaning Cycle: Compressed Air Pulse Jets Type of Filter: 16 oz Polyester Singed Felt, Caged Air to Cloth Ratio: 2.76 ft/min Min Collection Eff: 99% Pneumatic Conveyor to Air	9/12/1989	Design Capacity: 4,200 CFM @ 70 °F	Baghouse
DS-1	DS-1C	Densification Silo Air Densification Silo Number 1	9/12/1989	Design Capacity: 15,000 TPY	Baghouse
DS-1C	DS-1E	Air Densification Silo Number 1 Vent (Baghouse) – Microsilica is Densified by Air Turbulence Manufacturer: Research Conttrell Flex Kleen Model No.: 100-BVTC-25 (IIG) Compartments: 1 Total Cloth Area: 318 ft² Type: Continuous Automatic Cleaning Cycle: Compressed Air Pulse Jets Type of Filter: 16 oz Polyester Singed Felt, Caged Air to Cloth Ratio: 2.98 ft/min Min Collection Eff: 99%	9/12/1989	Design Capacity: 950 CFM @ 70 °F	Baghouse
DS-2C	DS-2C DS-2E	Air Densification Silo Number 2 Air Densification Silo Number 2 Vent (Baghouse) – Microsilica is Densified by Air Turbulence Manufacturer: Research Conttrell Flex Kleen Model No.: 100-BVTS-25 (IIG) Compartments: 1 Total Cloth Area: 318 ft² Type: Continuous Automatic Cleaning Cycle: Compressed Air Pulse Jets Type of Filter: 16 oz Polyester Singed Felt, Caged Air to Cloth Ratio: 3.14 ft/min Min Collection Eff: 99%	9/15/1993	Design Capacity: 15,000 TPY Design Capacity: 950 CFM @ 70 °F	Baghouse
DM-2C	DM-2E and Fugitives from Building	Air Densification Silos to Paper Bagging Operation or Super-Sack Station via Pneumatic Conveyor or Bulk Loading to Railcars or Trucks	9/12/1989	Design Capacity: 30,000 TPY	Baghouse

EAF = Electric Arc Furnace

Alloy Facility = West Virginia Alloy, Inc.

Virtual Stacks (Fugitives) Listing

Stack ID Number	Virtual Stack Description
007	Building 10/10A Fugitives
018	Building 5/5A Fugitives
019	Building 15/15A Fugitives
020	Building 19/19A Fugitives
021	Building 20/20A Fugitives
026	Product Handling Fugitives
027	Miscellaneous Fugitives

Tanks Listing

Source ID	Emission Point ID	Equipment Description	Design Capacity	Year Installed
None	None	Microsilica Slurry Storage Tank Tank Type: Aboveground - Vertical Roof Type: Fixed	360,000 gal	1983
		Stores: Microsilica Slurry		
None	None	Gasoline Tank	4,000 gal	1990
		Tank Type: Underground - Horizontal, fiberglass reinforced plastic with vapor recovery		
		Roof Type: Fixed		
		Stores: Gasoline		
None	None	Diesel Tank (Engine House)	10,000 gal	2003
		Tank Type: Aboveground – Horizontal		
		Roof Type: Fixed		
		Stores: Diesel		
None	None	Diesel Tank (Mix House)	550 gal	Early 1990's
		Tank Type: Aboveground - Horizontal		
		Roof Type: Fixed		
		Stores: Diesel		
None	None	Waste Oil Storage Tank	6,000 gal	Early 1990's
		Tank Type: Aboveground - Horizontal		
		Roof Type: Fixed		
		Stores: Used Oil		
None	None	Diethylene Glycol Storage Tank	12,000 gal	1991
		Tank Type: Aboveground Tanker Truck - Horizontal	, ,	
		Roof Type: Fixed		
		Stores: Diethylene Glycol		
None	None	Tar Tank	5,000 gal	Unknown
		Tank Type: Aboveground – Horizontal with heater	, ,	
		Roof Type: Fixed		
		Stores: Tar		

Source ID	Emission Point ID	Equipment Description	Design Capacity	Year Installed
None	None	Sulfuric Acid Storage	5,625 gal	1991
		Tank Type: Aboveground - Vertical		Replaced 2002
		Roof Type: Fixed		
		Stores: Sulfuric Acid		
None	None	Sulfuric Acid Storage	5,625 gal	1991
		Tank Type: Aboveground - Vertical		Replaced 2002
		Roof Type: Fixed		
		Stores: Sulfuric Acid		
None	None	Sodium Hydroxide Storage	12,000 gal	1991
		Tank Type: Aboveground - Vertical		
		Roof Type: Fixed		
		Stores: Sodium Hydroxide		
None	None	Ferrous Sulfate Storage	10,000 gal	1991
	Tank Type: Aboveground - Vertical			
		Roof Type: Fixed		
		Stores: Ferrous Sulfate		

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit numbers (e.g. R13-0123). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance	
<u>R14-0017B</u>	<u>January 3, 2006</u>	
<u>R13-2052</u>	May 21, 2003	

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	PM	Particulate Matter
CBI	Confidential Business Information	PM_{10}	Particulate Matter less
CEM	Continuous Emission Monitor		than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant
C.S.R. or CSR	Codes of State Rules		Deterioration
DAQ	Division of Air Quality	psi	Pounds per Square Inch
DEP	Department of Environmental	SIC	Standard Industrial
	Protection		Classification
FOIA	Freedom of Information Act	SIP	State Implementation
HAP	Hazardous Air Pollutant		Plan
HON	Hazardous Organic NESHAP	SO_2	Sulfur Dioxide
HP	Horsepower	TAP	Toxic Air Pollutant
lbs/hr	Pounds per Hour	TPY	Tons per Year
LDAR	Leak Detection and Repair	TRS	Total Reduced Sulfur
M	Thousand	TSP	Total Suspended
MACT	Maximum Achievable Control		Particulate
	Technology	USEPA	United States
MM	Million		Environmental
MMBtu/hr or	Million British Thermal Units per		Protection Agency
mmbtu/hr	Hour	UTM	Universal Transverse
MMCF/hr or	Million Cubic Feet Burned per		Mercator
mmcf/hr	Hour	VEE	Visual Emissions
NA	Not Applicable		Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic
	Standards		Compounds
NESHAPS	National Emissions Standards for		
	Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		
NSPS	New Source Performance		
	Standards		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.

[45CSR§30-4.1.a.3.]

- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.

[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

- c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
 - The change must meet all applicable requirements and may not violate any existing permit term or condition.

- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:
 - If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
 - b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
 - a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - Inspect at reasonable times (including all times in which the facility is in operation) any
 facilities, equipment (including monitoring and air pollution Control equipment), practices, or
 operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [45CSR§30-5.7.a.]
- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.17.3 [45CSR§30-5.7.c.] are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act. [45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:
 - a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
 - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
 - c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- Open burning. The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
 [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, or allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145 (b) (3) (i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health Environmental Health. **[40 C.F.R. 61]**
- 3.1.4. Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor at any location occupied by the public.
 [45CSR\$4-3.1 State-Enforceable only.]
- 3.1.5. **[Reserved]**
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

 [45CSR\$11-5.2.]
- 3.1.7. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4 (a) (14)]
- 3.1.8. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. An approved technician certification program pursuant to 40 C.F.R. § 82.161 must certify persons performing maintenance, service, repair, or disposal of appliances.

[40 C.F.R. 82, Subpart F]

3.1.9. **Risk Management Plan.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. Part 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71. **I40 C.F.R. 681**

3.1.10. **NO**_X **Budget Trading Program.** The permittee shall comply with the standard requirements set forth in the attached NO_X Budget Permit Application (see Appendix A) and the NO_X Budget Permit requirements set forth in 45CSR1 for each NO_X budget source. The complete NO_X Budget Permit Application shall be the NO_X Budget Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§1-6.1.b. and 20.1.]

a. The NO_X Budget portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§1-2 and, upon recordation by the Administrator under 45CSR§1-50 through 45CSR§1-57, 45CSR§1-60 through 45CSR§1-62 or 45CSR§1-80 through 45CSR§88, every allocation, transfer or deduction of a NO_X allowance to or from the compliance accounts of the NO_X Budget units covered by the permit or the overdraft account of the NO_X budget source covered by the permit.

[45CSR§1-23.2.]

Except as provided in 45CSR§1-23.2, the Director will revise the NO_X Budget portion of this
permit, as necessary, in accordance with the operating permit revision requirements set forth in
45CSR30.

[45CSR§1-24.1.]

3.1.11. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 45CSR§7- 3.2 (See Section 3.1.12), 3.3, 3.4, 3.5, 3.6, and 3.7 (See Section 3.1.13.).

[45CSR§7-3.1., 45CSR13, R13-2052, B.2., 45CSR14, R14-0017B, B.3.]

- 3.1.12. The provisions of Section 3.1.11 [45CSR§7-3.1.] shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. [45CSR§7-3.2.]
- 3.1.13. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 3.1.17 [45CSR§7-5.1.] is required to have a full enclosure and be equipped with a particulate matter control device. The loading and unloading of the above silos are not subject to standards of 45CSR§7-3.7, but are subject to the standard of 45CSR§7-5.1 to minimize emissions of fugitive particulate matter.

[45CSR§7-3.7., Group 001 and 006 (Ash Silo, Silo 7, Silo 14, DS-1 and DS-2)]

3.1.14. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR7. Following table list the equipment with their allowable stack emission rates.

Sources	Allowable Stack Emission Rate LB PM/hr	
C7P Impactor 004-02	3.4	
C7P Multi-Stage Crusher 004-03	33.0	
C6F Sizing and Cleaning 004-04	19.0	
C3P Multi-Stage Crusher 004-05	33.0	
C3P Drum Packing Station 004-06	10.0	
Silo 7	16	
Silo 14	16	
Dry Microsilica Facility		
DM1	6.0	
DM2	6.0	
DS1	37	
DS2	37	

[45CSR§7-4.1., 45CSR13, R13-2052, B.2., 45CSR14, R14-0017\(\begin{subarray}{c} \ B.3. \end{subarray} \), B.3., Groups 002, 003, 004, and 006]

- 3.1.15. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

 [45CSR§7-4.12.]
- 3.1.16. No person shall cause, suffer, allow, or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means that a particulate capture or suppression system shall be installed to ensure the lowest fugitive particulate emissions reasonably achievable.

[45CSR§7-5.1., 45CSR13, R13-2052, B.2., 45CSR14, R14-0017B, B.3.]

3.1.17. The owner or operator of a plant shall maintain dust control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary dust suppressants shall be applied in relation to stockpiling and general material handling to prevent dust generation and atmospheric entrainment.

[45CSR§7-5.2., 45CSR13, R13-2052, B.2., 45CSR14, R14-0017B, B.3.]

- 3.1.18. The provisions of Sections 3.1.11, 3.1.12, and 3.1.17 [45CSR§§7-3.1, 3.2, and 5.1] shall not apply to particulate matter emitted from the operation of a ferroalloy electric submerged arc furnace in existence prior to June 1, 1993 during blowing taphole events, poling and oxygen lancing operations. Poling emissions shall not exceed five (5) minutes in duration during any poling operation. [45CSR§7-5.3., 45CSR14, R14-0017B, B.3.]
- 3.1.19. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

 [45CSR§7-9.1.]
- 3.1.20. Maintenance operations (as defined in 45CSR7) shall be exempt from the provisions of 45CSR\$7-4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

 [45CSR\$7-10.3.]
- 3.1.21. An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director. The Director may approve an alternative visible emission standard for start-ups and shutdowns to the visible emission standard required under 45CSR§7-3. The petition shall include a demonstration satisfactory to the Director:
 - a. That it is technologically or economically infeasible to comply with 45CSR§7-3;
 - b. That establishes the need for approval of a start-up or shutdown plan based upon information including, but not limited to, monitoring results, opacity observations, operating procedures and source inspections.
 - c. That the particulate matter weight emission standards under 45CSR§7-4 are being met, as determined in accordance with 45CSR7A "Compliance Test Procedures For 45CSR7 'To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations"; and
 - d. That during periods of start-ups and shutdowns the owner or operator shall, to the extent practicable, maintain and operate any manufacturing process including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§7-10.4.]

3.1.22. **CAIR NO_x Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix B) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO_x Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§40-6.1.b. and 20.1.]

a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.

[45CSR§40-23.2.]

b. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§40-24.1.]

3.2. Monitoring Requirements

- 3.2.1. The permittee shall conduct monitoring/Record Keeping/reporting as follows. [Not required for open stockpiles and haulroads.]
 - a. The permittee shall perform monthly Method 22 visible emission observations for particulate matter emission activities for the emission sources identified as Groups 002, 004, 005, and 006 in the Emission Unit Table, Section 1.0. These visible emission observations shall be conducted by a certified Method 9 observer during periods of normal operation for a sufficient time interval to determine if any of the subject emission points have visible emissions and if so, determine the opacity of the emissions. If any of the subject emission points have visible emissions exceeding the regulatory limit of twenty percent (20%) opacity, then a 45CSR7A evaluation shall be conducted immediately after the violation of the regulatory limit unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR7A evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions.
 - b. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or 45CSR7A, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the monthly observations, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

3.2.2. The permittee shall maintain instrumentation on all dust collectors for pressure drop observations. The permittee shall maintain records of the maintenance performed on each baghouse. These records shall include all maintenance work performed on each dust collector including the frequency of bag/filter change outs. Records shall state the date and time of each dust collector inspection, the inspection results, and corrective action taken, if any. Records shall be maintained on site for five (5) years from the record creation date.

[45CSR§30-5.1.c.]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13]

3.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly

authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

[45CSR§7-8.1.]

3.3.3. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

[45CSR§7-8.2.]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

If to the US EPA:

Director Associate Director

WVDEP Office of Enforcement and Permits Review

Division of Air Quality (3AP12

601 57th Street SE U. S. Environmental Protection Agency

Charleston, WV 25304 Region III

1650 Arch Street

Phone: 304/926-0475 Philadelphia, PA 19103-2029

FAX: 304/926-0478

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. A responsible official must certify all required reports consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 - 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 - 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 - 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 - 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR33 (06/01/2000)	Acid Rain Provisions and Permits do not apply to Alloy Facility Metals Company – Alloy LP because it is not considered a Title IV (Acid Rain) Source.
40 C.F.R. §§ 60.40b – 60.49b NSPS Subpart Db (June 19, 1984)	Standards of Performance for Industrial – Commercial – Institutional Steam Generating Units does not apply because Alloy Facility's Boiler operation precedes the NSPS Subpart Db date of June 19, 1984.
40 C.F.R. §§ 60.251 - 60.254 NSPS Subpart Y (October 24, 1974)	Standards of Performance for Coal Preparation Plants do not apply because Alloy Facility coal operation precedes the NSPS Subpart Y date of October 24, 1974.
40 C.F.R. §§ 60.261 - 60.266 NSPS Subpart Z (October 24, 1974)	Standards of Performance for Ferroalloy Production Facilities does not apply because Alloy Facility's modification of Electric Arc Furnace Number 15 in 1997 did not meet 50% of the cost of the furnace to be considered reconstruction for the NSPS Subpart Z.
40 C.F.R. §§ 60.380 - 60.386 NSPS Subpart LL (August 24, 1982)	Standards of Performance for Metallic Mineral Processing do not apply because Alloy Facility operation proceeds the NSPS Subpart LL date of August 24, 1982.
40C.F.R.§§60.670 - 60.676 NSPS Subpart OOO (August 1, 1985)	These sections of 40 C.F.R. Part 60, Subpart OOO, do not apply to Alloy Facility since Alloy Facility does not crush and/or grind nonmetallic minerals.
60 C.F.R. §§ 60.730 - 60.737 NSPS Subpart UUU (April 23, 1986)	Standards of Performance for Calciners and Dryers in Mineral Industries do not apply because silica and ferrosilica are not listed as a mineral processed or produced in a mineral processing plant.
45CSR§10-5.1. (SIP approved version)	This process is not defined as a refinery process gas stream or any other process gas stream that contains hydrogen sulfides to be combusted.
45CSR17 (August 31, 2000)	Alloy Facility is subject to 45CSR7 which exempts it from 45CSR17, To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter, as stated in 45CSR§7-10.2.
40 C.F.R. Part 72 (01/11/93)	Acid Rain Program General Provisions does not apply to Alloy Facility because it is not considered a Title IV (Acid Rain) Source.

4.0. Source-Specific Requirements [Group 001: Boiler 4 (001-06), Coal Handling Facilities (001-02), Fly Ash Handling (001-07), Coal Stock Pile (001-01), and Control Devices - Electrostatic Precipitator (001-06c) and Water Spray 0020 and emission point ID(s) (Stacks 005, 026, and 027)]

4.1. Limitations and Standards

4.1.1. Emissions from Boiler 4 identified in permit application R14-17 as 001-06 shall not exceed the following:

Pollutant	lb/hr	TPY
SO_2	930.6	4,076
NO_x	367.2	1,608
Particulate Matter	30.6	127.7
PM_{10}	23.1	101.2
CO	12.8	53.6
VOC	1.54	6.4
Pb	0.015	0.05

[45CSR14, R14-0017^B, A.22., 001-06]

4.1.2. Particulate emissions from the boiler shall be controlled with an electrostatic precipitator (ESP) identified in permit application R14-17 as 001-06c. The ESP shall be installed, operated and maintained so as to achieve a minimum 99.3% control efficiency of particulate matter.

[45CSR14, R14-0017B, A.23., 001-06 and 001-06c]

- 4.1.3. The permittee shall not combust coal in Boiler 4 with a sulfur content of greater than 1.0%. [45CSR14, R14-0017B, A.24., 001-06]
- 4.1.4. The combustion of coal in Boiler 4 shall not exceed 224, 957 tons on an annual basis. The annual boiler fuel usage shall be calculated using a twelve- (12) month rolling total. A twelve- (12) month rolling total shall mean the sum of the coal consumed for the previous twelve- (12) consecutive months.

[45CSR14, R14-0017B, A.25., 001-06]

4.1.5. The combustion of coal in Boiler 4 shall not exceed 25.68 tons per hour provided that in no case shall the emission limitations in Section 4.1.1 be exceeded.

[45CSR14, R14-0017B, A.26., 001-06]

4.1.6. Low-NO_x burners shall be installed on Boiler Number 4 and shall be maintained and operated so as to reduce the formation of NO_x from the combustion coal in Boiler Number 4.

[45CSR14, R14-0017B, A.27., 001-06]

4.1.7. At all times that Boiler 4 is operated, the permittee shall maintain the Electrostatic Precipitator voltage within the levels established during the most recent compliance test which demonstrated compliance with 45CSR2 and this permit. The average voltage range is 15 to 45 kilovolts.

[45CSR14, R14-0017^B, A.29., 001-06, 001-06c]

4.1.8. Alloy Facility shall install, operate, maintain and certify SO₂ and NO_x CEMS on Boiler 4. NO_x CEMS shall be operated, maintained and certified in accordance with 45CSR1.
 [45CSR14, R14-0017B, A.31., 001-06]

4.1.9. Boilers 1, 2, and 3 shall not be modified, reconstructed or operated without Alloy Facility first receiving a permit pursuant to either 45CSR13 or 45CSR14.

[45CSR14, R14-0017B, A.32.]

4.1.10. Alloy Facility's Boiler 4 (006-01) NOx allowance allocations for each of the ozone seasons in years 2004 though 2007 is 118 tons.

[Consent Order CO-SIP-C-2002-13 A (2001), Section III, Item 1]

4.1.11. Alloy Facility's Boiler 4 is subject to the market trading and administrative adjustment provisions of 45CSR1. However, the NO_x allowance allocation set forth in Section 4.1.9 (Section III.1.b) for Alloy Facility's Boiler 4 shall not be revised without issuance of a superseding Order to effect any reallocation of the State NO_x Trading Program.

[Consent Order CO-SIP-C-2002-13 A (2001), Section IV, Item 1]

4.1.12. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1, 45CSR14, R14-0017B, B.2.]

- 4.1.13. No person shall cause, suffer, allow, or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:
 - (b) For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR2 Monitoring Plan (Appendix A) submitted on December 8, 2004 and any amendments thereto.

[45CSR§2-4.1, 45CSR2/2A, 45CSR14, R14-0017B, B.2.]

- 4.1.14. No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:
 - a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;

- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.1., 001-02, 001-07, 001-08, 001-01]

4.1.15. The visible emission standards set forth in 45CSR§2-3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.

[45CSR§2-9.1., 45CSR14, R14-0017B, B.2.]

4.1.16. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§2-9.2., Boiler 4 (001-06) and Electrostatic Precipitator (001-06c)]

- 4.1.17. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in 45CSR§§2-3 and 4) as provided in one of the following subdivisions:
 - a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 - 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - 2. Excess opacity does not exceed 40%.
 - b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in Section 4.1.16.a [45CSR§2-9.3.a], by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - 1. A detailed explanation of the factors involved or causes of the malfunction;
 - 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 3. An estimate of the mass of excess emissions discharged during the malfunction period;

- 4. The maximum opacity measured or observed during the malfunction;
- 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3., Boiler 4 (001-06) and Electrostatic Precipitator (001-06c)]

- 4.1.18. Maximum Allowable Emission Rates for Units in Region IV (Kanawha Valley Air Quality Control Region: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County)--No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:
 - c. For Type 'b' and Type 'c' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour, provided however, that no more than 5,500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks.

[45CSR§10-3.2. and §10-3.2.c., 45CSR14, R14-0017B, B.4.]

4.1.19. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in 45CSR§10-4.1.

[45CSR§10-4.1., Boiler 4 (001-06)]

4.1.20. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 45CSR10 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§10-9.1., Boiler 4 (001-06)]

4.1.21. Alloy Facility's Boiler 4 (001-06) shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD - "National Emissions Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters" no later than September 13, 2007 or any revised compliance date published by the USEPA. An Initial Notification as described in 40 C.F.R. § 63.7545 (b) was submitted by Alloy Facility on March 9, 2005. The permittee shall submit a complete application for a significant Title V permit modification to include the specific requirements of 40 C.F.R. 63, Subpart DDDDD in the operating permit no less than 6 months prior to September 13, 2007.

[45CSR§30-6.5.b.2., 45CSR34, 40 C.F.R. §§ 63.7495 (b) and 63.7545 (b), 001-06]

4.1.22. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2091, R14-17, R14-0017A and R14-0017B and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR14, R14-0017B, C.3., Boiler 4 (001-06)]

4.2. Monitoring Requirements

4.2.1. All required monitoring devices shall be checked for calibration annually in accordance with the procedures under 40 C.F.R. 60.13 (b).

[45CSR14, R14-0017B, A.21.]

4.2.2. Compliance with the visible emission requirements of Section 4.1.12 [45CSR§2-3.1] shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of Section 4.1.12 [45CSR§2-3.1]. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

[45CSR§2-3.2.]

4.2.3. The owner or operator of a fuel burning unit(s) shall monitor compliance with 45CSR§2-3 as set forth in an approved monitoring plan for each emission unit. Such monitoring plan(s) shall include, but not be limited to, one or more of the following: continuous measurement of emissions, monitoring of emission control equipment, periodic parametric monitoring, or such other monitoring as approved by the Director.

[45CSR§2-8.2.a., 45CSR14, R14-0017B, B.2.]

- 4.2.4. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
 - [45CSR§10-8.2.a.]
- 4.2.5. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with 45CSR§§10-3, 4 and 5 (Sections 4.1.18, 4.1.19, and 5.1.23) by testing and /or monitoring in accordance with one or more of the following: 40 C.F.R. Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on December 8, 2004 and any amendments thereto.

- 1. The installation, operation and maintenance of a continuous monitoring system meeting the requirements of 40 C.F.R. 60, Appendix B, Performance Specification 2 (PS2) or Performance Specification 7 (PS7) shall be deemed to fulfill the requirements of a monitoring plan for a fuel burning unit(s), manufacturing process source(s) or combustion source(s). CEMS meeting the requirements of 40 C.F.R. Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS2.
 - A. The owner or operator of a continuous emissions monitoring system installed pursuant to 45CSR10 shall follow the quality assurance requirements as set forth in 40 C.F.R. Part 60, Appendix F.
- 2. A fuel sampling and analysis program, including a record of fuel consumption, may fulfill the requirements of a monitoring plan for a fuel burning unit(s). The minimum requirements for a fuel sampling and analysis program, including fuel consumption records, shall be established by the Director.

[45CSR§10-8.2.c.]

4.3. Testing Requirements

- 4.3.1. Tests that may be required by the Director to determine compliance with the emission limitations set forth in Section 4.1.1 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at maximum achievable load unless otherwise specified by the Director.
 - a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, or 5D, as set forth in 40 C.F.R. 60, Appendix A.
 - b. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 C.F.R. 60, Appendix A.
 - c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10 or 10B as set forth in 40 C.F.R. 60, Appendix A.
 - d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 C.F.R. 60, Appendix A.
 - e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 C.F.R. 60, Appendix A.

[45CSR14, R14-0017B, A.17.]

- 4.3.2. The owner or operator of a fuel burning unit(s) shall demonstrate compliance with 45CSR§2-3 by periodic testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Director, and 45CSR§2-4 by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The owner or operator shall conduct such testing at a frequency to be established by the Director. [45CSR§2-8.1.a., 45CSR14, R14-0017B, B.2.]
- 4.3.3. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§10-3 (Section 4.1.18).

[45CSR§10-8.1.b.]

4.3.4. The permittee shall initially conduct tests to determine compliance with the particulate matter (PM) emission limitations in Section 4.1.1 for Boiler 4 stack (Stack 005). The permittee shall utilize 40 C.F.R. Part 60 Appendix A, Methods 5 or 5D for purposes of conducting performance tests, unless the Director approves an alternate or equivalent method. Requirements shall be met with respect to submission of a test protocol and notification of testing. The permittee last stack test on April 27, 2004 indicated a measurement of 20.83 lb of PM/hr, which is 68.07 % of the permitted limit of 30.60 lb of PM/hr.

Subsequent testing to determine compliance with the particulate matter (PM) limitations of Section 4.1.1 shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Initial	≤50% of particulate matter (PM) limit	Once/5 years
Initial	between 50% and 90 % of particulate matter (PM) limit	Once/3 years
Initial	≥90% particulate matter (PM) limit	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % particulate matter (PM)	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates $\leq 50\%$ of particulate matter (PM)	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates 50% of particulate matter (PM) limit	Once/5 years
Once/3 years	Once/3 years If testing is required once/3 years and any test indicates a mass emission rate ≥90% of particulate matter (PM) limit	
Once/5 years	Once/5 years If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of particulate matter (PM) limit	
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate $\geq 90\%$ of particulate matter (PM) limit	Annual

[45CSR§2-8.1., Boiler 4 (001-06), Stack 005]

4.3.5. Within 180 days of the installation of the Low-NO_x burners the permittee shall conduct compliance tests for Particulate Matter, NO_x, and SO₂. These tests shall be conducted in compliance with the following provisions and submitted to the Director:

- a. Tests must be conducted in accordance with Sections 4.3.1 and 3.3.1.
- b. Sulfur Content of the coal being combusted during the test shall be recorded.

[45CSR14, R14-0017B, A.28., 001-06]

4.4. Recordkeeping Requirements

- 4.4.1. The permittee shall install, calibrate, maintain, and operate the following:
 - a. A device(s) capable of continuously measuring and recording the ESP voltage.

[45CSR14, R14-0017B, A.18.d.]

4.4.2. The owner or operator of a fuel burning unit(s) shall maintain on-site all records of monitored data established in the monitoring plan pursuant to 45CSR§2-8.2.a. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR2 Monitoring Plan (Appendix A) submitted on December 8, 2004 and any amendments thereto.

[45CSR§2-8.3.a.]

- 4.4.3. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 and 5 (Sections 4.1.18, 4.1.19, and 5.1.23) shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on December 8, 2004, and any amendments thereto. [45CSR§2-8.3.c.]
- 4.4.4. Under the provisions of this permit, the permittee shall maintain records containing the following information in a format that can be readily made available to the Director:
 - For the Electrostatic Precipitator in use by Boiler 4, the ESP voltage data.

Said records shall be maintained on site for a period of five (5) years. Said records shall be certified by a responsible official or his/her designee and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.

[45CSR14, R14-0017B, A.19.]

- 4.4.5. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§\$10-3, 4 and 5 (Sections 4.1.18, 4.1.19, and 5.1.23) shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Compliance with this requirement may be satisfied through compliance with the requirements of the approved 45CSR10 Monitoring Plan (Appendix A) submitted on December 8, 2004, and any amendments thereto. [45CSR§10-8.3.a.]
- 4.4.6. In order to determine compliance with the emission limitations set forth in Section 4.1.1, and the combustion limitations set forth in Sections 4.1.4 and 4.1.5 permittee shall keep certified daily records of the amount of coal combusted in Boiler Number 4, the date and time of start-up and shutdown, and an ash and BTU analysis for each shipment (45CSR§2A-7.1.a.4). In West Virginia Alloys, Inc.'s case, shipments are up to 5000 tons. Such records shall be kept on site for a period of five years and be made available to the Director or his duly authorized representative upon request. Such records shall be kept on site for a period of five years and be made available to the Director or his duly authorized representative upon request.

[45CSR14, R14-0017B, B.6.]

- 4.4.7. In order to determine compliance with the emission limitations set forth in Section 4.1.1 and the combustion limitation set forth in Section 4.1.5, the permittee shall keep certified daily records of the hours of operation of Boiler Number 4. Such records shall be kept on site for a period of five years and be made available to the Director or his duly authorized representative upon request.
 - [45CSR14, R14-0017B, B.7., 001-06]
- 4.4.8. A Boiler 4 CEMS Summary Report and/or a "CEMS Excursion and Monitoring System Performance Report" shall be submitted to the Division of Air Quality quarterly no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A to 45 CSR10 A.

 [45CSR14, R14-0017], B.8., 001-06]
- 4.4.9. If during the quarterly reporting period of Section 4.4.8 the total duration of excursions in excess of 930.6 lb/hr for the calendar quarter is less than four percent (4%) of the total source operating time for the calendar quarter and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the calendar quarter, only the CEMS Summary Report shall be submitted and the CEMS Excursion and Monitoring System Performance report shall be maintained onsite to be submitted to the Division of Air Quality upon request.

[45CSR14, R14-0017B, B.9., 001-06]

4.4.10. If during the quarterly reporting period of Section 4.4.8 the total duration of excursions in excess of 930.6 lb/hr for the calendar quarter is four percent (4%) or greater of the total source operating time for the calendar quarter or the total monitoring method downtime for the reporting period is five percent (5%) or greater of the total source operating time for the calendar quarter, the CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report shall both be submitted to the Division of Air Quality.

[45CSR14, R14-0017B, B.10., 001-06]

- 4.4.11. The CEMS Excursion and Monitoring System Performance Report shall be in a format as provided in Appendix A to 45CSR10 and shall include the following information:
 - The magnitude of each excursion, and the date and time, including starting and ending times, a. of each excursion;
 - Specific identification of each excursion that occurs during startups, shutdowns and b. malfunctions of the facility;
 - The nature and cause of any malfunction (if known), and the corrective action taken and c. preventative measures adopted;
 - d. The date and time identifying each period during which quality controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system; and
 - When no excursions have occurred or there were no periods of quality controlled data e. unavailability, and no monitoring systems were inoperative, repaired or adjusted, such information shall be stated in the report.

[45CSR14, R14-0017^B, B.11., 001-06]

4.5. **Reporting Requirements**

- In accordance with Alloy Facility's 45CSR2/2A Monitoring Plan (Appendix A) that was submitted on 4.5.1. December 8, 2004 or as amended, Alloy Facility shall submit a "COMS Summary Report" and an "Excursion and COMS Monitoring System Performance Report" on a quarterly basis to the Director by the 30th day of the month following the calendar quarter. [45CSR§2-8.3.]
- In accordance with Alloy Facility's 45CSR10 Monitoring Plan (Appendix A) that was submitted on 4.5.2.
- December 8, 2004 or as amended, Alloy Facility shall submit a "CEMS Summary Report" and a "CEMS Excursion and Monitoring Plan Performance Report" on a quarterly basis to the Director by the 45th day of the month following the calendar quarter. The excursion reports shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§10-8.3.]

4.5.3. Upon start-up of the chosen devices required to be installed, calibrated and maintained in Section 4.4.1, the permittee shall provide written notice of the type of device installed or of any future change in the type of device installed.

[45CSR14, R14-0017B, A.20.]

4.6. Compliance Plan

4.6.1. None 5.0. Source-Specific Requirements [Electric Submerged Arc Furnace Numbers 3 (003-01), 6 (003-03), 7 (003-04), 9 (003-05), 14 (003-06), 15 (003-07), and 16 (003-08) Group 003, Dust Collector ID(s) (0004, 0005, 0006, 0007, 0008, 0011, 0012, 0013, 0014, and 0024), and emission point ID(s) (Stacks 009, 010, 011, 012, 015, 016, 017, 026, and 029]

5.1. Limitations and Standards

5.1.1. Particulate emissions from electric submerged arc Furnace 15 (ID 003-07) shall be controlled by venting gases from the furnace and controlled furnace tapping operations through baghouse 0012 or 0013 (emission point IDs. 016 or 017).

[45CSR14, R14-0017B, A.1., 003-07, 016, 017]

5.1.2. The mass of particulate matter entering Baghouse number 0012 and/or baghouse number 0013 operated in conjunction with furnace number 15 shall be reduced by at least 99% before discharge to the atmosphere.

[45CSR14A, R14-0017B, A.2., 003-07, 016, 017]

5.1.3. Visible emissions from all operations directly associated with furnace number 15 (including furnace charging, refining, tapping, and ladle additions,) shall not equal or exceed 20% opacity [Section 5.1.18.a] (45CSR§7-4.7.a). In accordance with 45CSR7 and 45CSR7A, opacity observations at the baghouse discharge points, the roof monitor above furnace number 15, and from all external ductwork handling gases from furnace number 15 shall not be as dark as or darker in shade than 20% opacity. Opacity observations shall not be averaged in determining compliance with this visible emission limitation. This visible emission standard shall not be applicable during blowing taphole events, poling, and oxygen lancing. Poling emissions shall not exceed five (5) minutes in duration during any poling operation.

[45CSR14, R14-0017B, A.3., 003-07]

5.1.4. Visible emissions from casting and associated operations following removal of the ladle (s) from the tapping station (including ladle switching, slag handling and reladling) shall not exceed the 20% opacity except that visible emissions from such operations shall not equal or exceed 40% opacity for an aggregate 5 minutes in any 60 minute period.

[45CSR14, R14-0017B, A.4., 003-07]

5.1.5. The company shall adhere to the following standard operating practices with respect to casting operations associated with Furnace number 15:

For molten slag handling operations:

- 1. After the pouring has been completed, the ladle is brought to a full upright position and moved to the rakeout station.
- 2. The bottom blowing system remains on low-flow mode through the entire rakeout and repositioning process.
- 3. The ladle is lowered as close to the bottom of the pit as possible and slowly turned completely over to dump any loose slag.

- 4. The ladle then is raised parallel to the ground and the harder-to-remove slag is "raked" out by the operator using a rakeout machine.
- 5. The ladle is once again lowered close to the ground and turned completely over to dump any slag remaining in the ladle.
- 6. The ladle is righted and moved back into the pit.

For casting operations:

- 1. Removal of non-process material in chills prior to pouring to chills.
- 2. Keep ladle lip close to chills during pouring to chills.
- 3. Reduce refining gas flow during pouring to chills.
- 4. Reduce molten metal temperature prior to pouring to chills.

[45CSR14, R14-0017^B, A.5., 003-07]

5.1.6. Testing to determine compliance with Sections 5.1.3 and 5.1.4 shall be conducted in accordance with 45CSR7A or an alternative method approved by the Director.

[45CSR14, R14-0017\(\frac{1}{12}\), A.6., 003-07]

5.1.7. Emissions from electric submerged arc Furnace 15 vented through emission point (Stacks 016 or 017) shall not exceed the following types and amounts of pollutants:

POLLUTANT	LB/HR	TONS/YR
Lead	0.01	0.03
Particulate Matter (PM)	26.57	111.6
Particulate Matter < 10 microns (PM ₁₀)	22.71	95.38
Volatile Organic Compounds (VOC)	3.54	15.51
Oxides of Nitrogen (NO _x)	40.9	171.8
Sulfur Dioxide (SO ₂)	68.7	288.54
Carbon Monoxide (CO)	54.0	226.98

[45CSR14, R14-0017B, A.7., 003-07, 016, 017]

- 5.1.8. Electric submerged arc Furnace 15 shall not produce ferroalloys in excess of 18,000 tons per calendar year. Provided that in no event shall the emission limits set forth in Section 5.1.7 be exceeded. [45CSR14, R14-0017B, A.8., 003-07]
- 5.1.9. The Director has approved the particulate emission limitations for furnace number 15 in Sections 5.1.2, 5.1.3, and 5.1.7 based upon the presumption that number 15 furnace and all other components of the duplicate source operation including all operating electric submerged arc furnaces comply with the provisions of Section 5.1.18.a [45CSR§7-4.7.a.]. Upon any finding by the Director that any part of this duplicate source operation fails to comply with the provisions of 45CSR7, Section 4.7.a, furnace number 15 shall be subject to a particulate mass emission limitation determined in accordance with 45CSR§87-4.1 (Section 3.1.14), 4.4 (Section 5.1.16), 4.7 (Section 5.1.18), and 4.8 (Section 5.1.19), and including 45CSR§7-4.5 (Section 5.1.17) if also applicable.

[45CSR14, R14-0017B, A.9.]

5.1.10. Visible emissions from the material handling and/or preparation activities identified as process area ID 026 (Stack 026) in Permit Application R13-2091 shall be minimized through the use of a slurry truck (unless the baghouse dust is being sold as a product in which case it may be loaded out either dry or wet) to collect baghouse dust and operation of a suction pipe surrounding the dust discharge pipe into the truck to collect fugitive dust. Particulate emissions of slag loading to barges shall be minimized through the use of wet suppression.

[45CSR14, R14-0017B, A.10.]

5.1.11. Volumetric gas flow as shown by the volumetric gas flow rate through tapping and poling hoods and gates associated with Furnaces 3, 6, 7, 14, and 15 OR fan motor power consumption of each motor of each fan serving to move gases through each of the tapping control system hoods on Furnaces 3, 6, 7, 14, and 15 shall be maintained at or above the levels established during the most recent compliance tests which demonstrated compliance with 45CSR7, and these systems shall be designed, maintained, and operated so as to conform to the capture efficiency and mass emission rates set forth in permit application number R13-2091 and R14-17, at all times that Furnaces 3, 6, 7, 14, or 15 are in operation. The tapping and poling hoods and gates shall be positioned and all tapping operations fans and hoods will be operated to assure maximum feasible capture of emissions during all tapping operations including during ladle additions, blowing tapholes, poling, oxygen lancing operations, plugging, burning, and switching ladles.

[45CSR14, R14-0017^B, A.11.]

5.1.12. The physical configuration of all particulate capture equipment associated with Furnace 15, including hoods and ductwork and the method of operation of such equipment, including moveable hoods and gates, shall be maintained in accordance with permit application number R13-2091 and R14-17 and the most recent performance test demonstrating compliance, unless the permittee receives approval from the Director for an alternative or equivalent design or modified operation. This requirement is also applicable to Furnaces 3, 6, 7, and 14 with respect to particulate matter capture systems for tapping and associated operations.

[45CSR14, R14-0017B, A.12.]

5.1.13. At all times that electric submerged arc Furnace 15 is operated, the permittee shall maintain total volumetric gas flow to the baghouse(s), as shown by the volumetric gas flow rate to Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15 or fan motor power consumption of each motor of each fan serving to move gases to Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15, at or above the levels established during the most recent compliance tests which demonstrated compliance with 45CSR7 and this permit.

[45CSR14, R14-0017B, A.13., 003-07, 016, 017]

5.1.14. The Director may require the permittee to verify any fan performance curve by monitoring necessary fanoperating parameters and determining the gas volume moved using methods 1 and 2 of 40 C.F.R. 60, Appendix A.

[45CSR14, R14-0017B, A.14.]

5.1.15. At all times that electric submerged arc Furnace 15 is operated, the permittee shall maintain the pressure drop across each separate compartment of Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15 within the levels established during the most recent compliance test which demonstrated compliance with 45CSR7 and this permit. The average pressure drop for Baghouses 14 and 15 is between 7" and 13" water gauge.

[45CSR14, R14-0017^B, A.15., 003-07, 016, 017]

5.1.16. If a duplicate source operation that meets the requirements of 45CSR7 is expanded or if a source operation that meets the requirements of 45CSR7 is expanded to form a duplicate source operation, the total allowable emission rate for the expanded portion shall be determined by the following formula:

$$\mathbf{R}_{e} = (\mathbf{W}_{e} / \mathbf{W}_{et}) \mathbf{R}_{et}$$

Where:

 $R_{\rm e}$ is the total allowable emission rate in pounds per hour for the new expanded portion of the duplicate source operation;

W_{et} is the total operating process weight rate in pounds per hour of the source operation or duplicate source operation prior to expansion plus the operating process weight rate of the new expanded portion;

 R_{et} is allowable emission rate in pounds per hour found in Section 3.1.14 [45CSR§7-4.1.] opposite the process weight rate, W_{et} ; and

W_e is the operating process weight rate in pounds per hour for the new expanded portion.

[45CSR§7-4.4.]

5.1.17. Separate stack emission rates for the new expanded portions of concern in Section 5.1.16 [45CSR§7-4.4.] shall be calculated as per Section 5.1.19 [45CSR§7-4.8]. The applicable stack emission rate(s) so calculated shall be additive with the existing emission rate for any stack used to vent both an existing source operation or duplicate source operation(s) and addition(s) or portion(s) thereof.

[45CSR§7-4.5.]

- 5.1.18. Except as noted in Section 5.1.18.a [45CSR§7-4.7.a.], the increase of the operating process weight rate of any manufacturing process source operation or duplicate source operation by the operation of new, replacement, reactivated and/or altered source operation(s) shall be considered as an expansion and the allowable emission rates from the source operation(s) which resulted in the increase shall be determined as per Section 5.1.16 [45CSR§7-4.4].
 - a. Type 'b' duplicate source operations whose air pollution control equipment efficiency is a minimum of ninety-nine percent (99%) by weight and whose total process weight rate is less than two hundred fifty thousand (250,000) pounds per hour shall be exempted from the requirements of Section 3.1.14 [45CSR§7-4.1.] provided that smoke emitted into the open air from any such duplicate source operation is less than twenty percent (20%) opacity. If a duplicate source operation is expanded by the addition of a new source operation(s) and the total operating process weight rate is then greater than two hundred fifty thousand (250,000) pounds per hour, the allowable emission rates from the source operation which resulted in the increase above two hundred fifty thousand (250,000) pounds per hour shall be determined as per Section 5.1.16 [45CSR§7-4.4].

[45CSR§§7-4.7. and 4.7.a., 003-01, 003-03, 003-04, 003-05, 003-06, 003-07, and 003-08]

5.1.19. Where more than one source operation or combinations thereof, which are part of a duplicate source operation, are vented through separate stacks, the allowable stack emission rates for the separate stacks shall be determined by the following formula:

$$\mathbf{R}_{s} = \mathbf{R}_{t} \left(\mathbf{W}_{s} / \mathbf{W}_{t} \right)$$

Where,

 R_s is the allowable stack emission rate for the separate stack venting the source operation(s) in question;

R_t is the total allowable emission rate for the duplicate source operation;

 W_s is the operating process weight rate for the source operation(s) vented through the separate stack; and

W_t is the total operating process weight rate for the duplicate source operation.

[45CSR§7-4.8., 003-01, 003-03, 003-04, 003-05, 003-06, 003-07, and 003-08]

- 5.1.20. Even after the expiration of consent order CO-R14-E-2002-2003 Alloy Facility shall continue to follow all requirements and work practices as outlined in section V.9 of said consent order.
 - a. Revised casting process to reduce the gas flow level used for refining, to lower generation of fugitive particular matter emissions while using the floating slag refining technique for casting process and to reduce fugitive particulate matter for casting stations and ladle rake out stations for Furnaces 3, 6, 7, 9, 14, and 15.
 - b. Reduced the gas flow level during the ladle rake out process, to lower the generation of fugitive particulate matter emissions during the ladle rake operation.
 - c. Operate improved plugging technology on Furnaces Nos. 6, 7, 14, and 15, which will allow the taphole to be plugged during periods of blowing taps.
 - d. Operate converted electrode system on Furnace 14 (installed 2003) to reduce the quantity of fugitive particulate matter.

[45CSR14, R14-0017B, A.30., Consent Order CO-R14-E-2002-03, V., 9.]

5.1.21. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2091, R14-17, R14-0017A and R14-0017B, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR14, R14-0017^B, C.3.]

5.1.22. Mineral acids shall not be released form any type source operation or duplicate source operation or from any air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7. Following table lists the equipment with their allowable stack emission rates for hydrogen chloride (HCl) and Sulfuric Acid (H₂SO₄).

Electric Submerged Arc Furnace	- Pollutant	Allowable Stack Emission Rate	
Number	Tonutunt	Milligrams Per Dry Cubic Meter	
3	HCl Mist and/or Vapor	210	
3	Sulfuric Acid Mist	35	
6	HCl Mist and/or Vapor	420	
8	Sulfuric Acid Mist	70	
7	HCl Mist and/or Vapor	420	
7	Sulfuric Acid Mist	70	
9	HCl Mist and/or Vapor	420	
9	Sulfuric Acid Mist	70	
14	HCl Mist and/or Vapor	420	
14	Sulfuric Acid Mist	70	
15	HCl Mist and/or Vapor	420	
13	Sulfuric Acid Mist	70	
16	HCl Mist and/or Vapor	420	
10	Sulfuric Acid Mist	70	

[45CSR§7-4.2.]

5.1.23. No person shall cause, suffer, allow, or permit the emission into open air from any source operation an instack sulfur dioxide concentration exceeding 2000 ppmv by volume from existing source operations, except as provided in 45CSR§10-4.1.

[45CSR§10-4.1.]

5.2. Monitoring Requirements

- 5.2.1. The permittee shall adhere to the following standard operating procedures for Baghouses 14 (0012) and 15 (0013):
 - 1. Daily inspection of baghouse visible emissions when servicing Furnace 15.
 - 2. Weekly confirmation that dust is being removed from the hoppers when servicing Furnace 15.
 - 3. Monthly checks of bag cleaning mechanisms for proper functioning when servicing Furnace 15.
 - 4. Quarterly confirmation of the physical integrity of the baghouse when servicing Furnace 15.
 - 5. Semiannual inspection of the fans when servicing Furnace 15.

[45CSR14, R14-0017B, A.16.]

5.2.2. All required monitoring devices shall be checked for calibration annually in accordance with the procedures under 40 CFR 60.13(b).

[45CSR14, R14-0017B, A.21.]

- 5.2.3. The permittee shall conduct monitoring/Record Keeping/reporting for electric arc furnaces (3, 6, 7, 9, 14, 15, and 16) including tapping and pouring.
 - Initially, the Method 22 test shall be performed once every four (4) months for two years for each a. operating furnace for one complete tap cycle, regardless if a poling, blowing taphole or oxygen lance operation is captured, for fugitive particulate emission by a certified Method 9 observer. If there are no visible emissions detected, then Alloy Facility may perform semi-annual visible emission readings for each operating furnace for one complete tap cycle, regardless if a poling, blowing taphole or oxygen lance operation is captured. The tap and pouring cycle shall be defined as from the initiation of the tap until the ladle is returned to the pit and the tapping hood is closed, after the completion of the pouring. If any of the subject emission points have visible emissions equal to or exceeding twenty percent (20%) opacity, then a 45CSR7A evaluation shall be conducted immediately after the violation of the regulatory limit unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR7A evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions. If visible emissions are detected during the semi-annual frequency, the permittee shall revert back to performing the visible emission readings every four (4) months for two years. If no visible emissions are detected during this period, then the permittee may proceed with semi-annual visible emissions.
 - b. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

- 5.2.4. For 45CSR10 Monitoring Plan, see Appendix A and Section 4.2.5.
- 5.2.5. The permittee shall install, calibrate, maintain, and operate the following:
 - a. A device(s) capable of continuously measuring, and recording at least once per shift, the volumetric gas flowrate or fan motor power consumption across each fan serving to move gases through the tapping hoods and associated ductwork of Furnaces 3, 6, 7, 14, 15, and 16. Each gas flow measurement device shall have an accuracy of \pm 10 percent over its operating range, and each fan power consumption measurement device shall have an accuracy of \pm 5 percent over its operating range. If the option of volumetric gas flowrate is chosen, the device(s) shall be installed within 180 days of start-up of Furnace 15. If the option of fan motor power consumption is chosen, the device(s) shall be installed within 60 days of start-up of Furnace 15.
 - b. A device(s) capable of continuously measuring, and recording at least once per shift, volumetric gas flowrate or fan motor power consumption across each fan serving to move all gases from Furnace 15 to the baghouse(s) serving Furnace 15. Each gas flow measurement device shall have an accuracy of \pm 10 percent over its operating range, and each fan power consumption measurement device shall have an accuracy of \pm 5 percent over its operating range.
 - c. A device(s) capable of continuously measuring and recording pressure drop across each separate compartment of Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15. Each such device shall have an accuracy of \pm 5 percent over its operating range.

[45CSR14, R14-0017^B, A.18.a., b., c.]

5.2.6. The permittee shall monitor the process weight rate of each Furnace and maintain a 12 month rolling average to determine that the total process weight rate is less than 250,000 LB/hr.

[45CSR§30-5.1.c., Furnaces]

5.3. Testing Requirements

- 5.3.1. Tests that may be required by the Director to determine compliance with the emission limitations set forth in Sections 5.1.2 and 5.1.7 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at maximum achievable load unless otherwise specified by the Director.
 - a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, or 5D, as set forth in 40 C.F.R. 60, Appendix A.
 - b. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 C.F.R. 60, Appendix A.
 - c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10 or 10B as set forth in 40 C.F.R. 60, Appendix A.
 - d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 C.F.R. 60, Appendix A.
 - e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 C.F.R. 60, Appendix A.

[45CSR14, R14-0017B, A.17.]

5.3.2. The permittee shall initially conduct tests to determine compliance with the nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC), and particulate matter (PM) emission limitations in Section 5.1.7 for Furnace 15 (Stacks 016 and 017). The Methods listed below from Appendix A of 40 C.F.R. Part 60 shall be utilized for purposes of conducting performance tests, unless the Director approves an alternate or equivalent method. Requirements shall be met with respect to submission of a test protocol and notification of testing.

Pollutant	Method	
Nitrogen Oxides (NO _x)	7	
Carbon Monoxide (CO)	10	
Sulfur Dioxide (SO ₂)	6	
Volatile Organic Compounds (VOC)	25	
Particulate Matter (PM)	5	
Hydrochloric Acid (HCl)	26	
Sulfuric Acid (H ₂ SO ₄)	8	

Subsequent testing to determine compliance with the nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), volatile organic compounds (VOC), particulate matter (PM) limitations of Section 5.1.7 and hydrochloric acid (HCI) and sulfuric acid (H_2SO_4) limitations of Section 5.1.22, shall be conducted in accordance with the schedule set forth in the following table.

Test	Test Results	Testing Frequency
Initial	≤50% of NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Once/5 years
Initial	between 50% and 90 % of NO_x , CO , SO_2 , PM , VOC , HCl , H_2SO_4 limits	Once/3 years
Initial	≥90% NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates \leq 50% of NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates 50% of NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Once/5 years
Once/3 years	ce/3 years If testing is required once/3 years and any test indicates a mass emission rate ≥90% of NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of NO _x , CO, SO ₂ , PM, VOC, HCl, H ₂ SO ₄ limits	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate $\geq 90\%$ of NO_x , CO , SO_2 , PM , VOC , HCl , H_2SO_4 limits	Annual

[45CSR§30-5.1.c., 45CSR§7-8.1., Furnace 15 (003-07), Stacks 016 and 017]

5.4. Recordkeeping Requirements

5.4.1. The Director may modify the requirement to record data in Sections 5.2.5.a and 5.2.5.b to establish a different frequency of recording such data.

[45CSR14, R14-0017B, A.18.e.]

- 5.4.2. Under the provisions of this permit, the permittee shall maintain records containing the following information in a format that can be readily made available to the Director:
 - Type and quantity of material produced in Furnace 15 on at least a daily basis
 - Volumetric gas flowrate(s) through the tapping hood systems of Furnaces 3, 6, 7, 14, and 15 or fan
 motor power consumption of each fan serving to move gases through the tapping hood systems of
 Furnaces 3, 6, 7, 14, and 15
 - Total volumetric gas flowrate(s) to Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15 or fan motor power consumption of each motor of each fan serving to move gases to Baghouses 14 (0012) and 15 (0013) when servicing Furnace 15
 - For the baghouse(s) in use by Furnace 15, the baghouse(s) pressure drop data (for each section or module)
 - Fan performance curves for all fans serving Furnace 15 and those fans serving the tapping operations for Furnaces 3, 6, 7, and 14
 - Recordkeeping of poling operations to determine compliance with 45CSR§7-5.3 and Section 5.1.3, provided that failure to keep such records shall not be a violation of this permit, but failure to keep such records shall be a waiver of the defense of 45CSR§7-5.3 as to poling.
 - Records of maintenance checks and standard operating procedures required in Sections 5.1.5 and 5.2.1.

Said records shall be maintained on site for a period of five (5) years. Said records shall be certified by a responsible official or his/her designee and made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request.

[45CSR14, R14-0017B, A.19.]

5.4.3. For 45CSR10 Monitoring Plan, see Appendix A and Sections 4.4.2, 4.4.3, and 4.4.5 of this permit.

5.5. Reporting Requirements

5.5.1. Upon start-up of the chosen devices required to be installed, calibrated and maintained in Section 5.2.4, the permittee shall provide written notice of the type of device installed or of any future change in the type of device installed.

[45CSR14, R14-0017B, A.20.]

5.5.2. For 45CSR10 Monitoring Plan, see Appendix A and Sections 4.5.1 and 4.5.2 of this permit.

5.6. Compliance Plan

5.6.1. None

6.0 Source-Specific Requirements [Microsilica Operations Buildings 155 and 156 (004-09, MS-1, MS-2, MS-3, DM-1, DM-2, DS-1, DS-1C, DS-2, DS-2C) and emission ID(s) (MS-1C, MS-1E, DM-1C, DM-1E, DM-2C, DM-2E, DS-1C, DS-1E, DS-2C, DS-2E, and 026)]

6.1. Limitations and Standards

6.1.1 The maximum amount of raw material processed in the dry microsilica facility shall not exceed 30,000 tons per year. Compliance with the annual throughput limit shall be determined using a 12 month rolling total. A 12 month rolling total shall mean the sum of the raw material throughput at any given time for the previous twelve (12) consecutive calendar months.

[45CSR13, R13-2052, A.1.]

- 6.1.2 The maximum amount of raw material processed in the slurry mixing facility shall not exceed 10,000 tons per year. Compliance with the annual throughput limit shall be determined using a 12 month rolling total. [45CSR13, R13-2052, A.2.]
- 6.1.3 Particulate Matter emissions from the equipment and processes identified in permit application R13-2052 as DM-1, DM-2, DS-1, and DS-2 shall be controlled by baghouses. The baghouses shall be installed, operated, and maintained so as to achieve a minimum overall efficiency of 99%.

 [45CSR13, R13-2052, A.3.]
- 6.1.4 Particulate Matter (PM) emissions from the facility shall not exceed the following:

Emission Source	Pounds per Hour	Tons Per Year
DM-1	0.01	0.04
DM-2	0.01	0.04
DS-1	0.27	0.02
DS-2	0.27	0.02
Total	0.56	0.12

[45CSR13, R13-2052, A.4.]

6.1.5. At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Director thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Director may specify shall be conducted to determine compliance.

[45CSR§13-6.1, R13-2052, B.3.]

6.1.6. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2052 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR13, R13-2052, C.3.]

6.2. Monitoring Requirements

6.2.1 See Section 3.2.

6.3. Testing Requirements

6.3.1 See Section 3.3.

6.4. Record Keeping Requirements

6.4.1 In order to determine compliance with Sections 6.1.1 and 6.1.2 of this permit, the permittee shall maintain certified monthly records of the amount of raw material processed in the slurry mixing facility and the dry microsilica facility.

[45CSR13, R13-2052, B.4.]

6.4.2. See Section 3.4.

6.5. Reporting Requirements

6.5.1 See Section 3.5.

6.6. Compliance Plan

6.6.1 None

- 7.0 Source-Specific Requirements [West Virginia Environmental Services, Inc. (WVES), Landfill Haulroads (005-03 and 005-04)]
 - 7.1. Limitations and Standards
 - 7.1.1. See Section 2.0 of this permit.
 - 7.1.2. See Section 3.1.1, 3.1.2, 3.1.4, 3.1.6, 3.1.7, and 3.1.17 of this permit.
 - 7.2. Monitoring Requirements
 - 7.2.1 None
 - 7.3. Testing Requirements
 - 7.3.1. None
 - 7.4. Record Keeping Requirements
 - 7.4.1. See Section 3.4 of this permit.
 - 7.5. Reporting Requirements
 - 7.5.1. See Section 3.5 of this permit.
 - 7.6. Compliance Plan
 - 7.6.1. None

APPENDIX A

45CSR2 & 45CSR10 Monitoring Plan for Alloy Facility

- **Coal Fired Boiler 4 (581.8 MMBtu/hr)**
- Electric Submerged Arc Furnaces Furnaces 3, 6, 7, 9, 14, 15, and 16

Facility Information:

Facility Name: Alloy Facility Metals Company – Alloy, LP

Facility Address: PO Box 613 Alloy, WV 25002

Facility Contact: Roger Wagner, Manager - SHEA, 304-779-3379

In accordance with 45 CSR 10, §8.2.c, and 45 CSR 10A §§5-7 the following is the proposed plan for monitoring compliance with the sulfur dioxide standards of 45 CSR 10, §3 for fuel burning units and §4 for manufacturing sources:

Facility Description:

Alloy Facility (SIC Codes 3313 and 4911) owns and operates a ferroalloy manufacturing plant producing silicon and ferrosilicon near Alloy, Fayette County, WV. Coal, gravel, and wood chips are brought to the plant by truck, rail and barge. These raw materials are sent to the mix building, batched and conveyed to each of the furnaces where it is reduced to silicon metal. Molten metal is tapped into large crucibles and cast into chills. After the metal hardens, it is sent to packing area for crushing, sizing, and packaging. The product is shipped directly by rail or packaged for specific customer. The coal-fired #4 Boiler generates electricity for Alloy Plant operation.

Sources of sulfur dioxide emissions are summarized in Tables 1 and 1A below:

Table 1 - Fuel Burning Units at Alloy Facility Metals

Title V	Title V	Unit	Business	Source	DHI
ID	(Stack)	Description	Unit	Class	(mmBTU)
001-06	0004	#4 Boiler	Power House	Type 'b'	581.8

Table 1-A Manufacturing Process Units at Alloy Facility Metals

Title V ID	Unit Description
00301	No. 3 Furnace
00303	No. 6 Furnace
00304	No. 7 Furnace
00305	No. 9 Furnace
00306	No. 14 Furnace
00307	No. 15 Furnace
00308	No. 16 Furnace

I. #4 BOILER - FUEL BURNING UNIT

A. Applicable Standard:

45 CSR 10, § 3.2: Sulfur Dioxide Weight Emissions Standards-for Fuel Burning Units

Maximum Allowable Emission Rates for Similar Units in Region IV (Kanawha Valley Air Quality Control Region: Kanawha County, Putnam County, and Falls and Kanawha Magisterial Districts of Fayette County)--No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows: .. For Type 'b' and Type 'c' fuel burning units, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour, provided however, that no more than 5,500 pounds per hour of sulfur dioxide shall be discharged into the open air from all such stacks. §45-10-3.2.c.

Pursuant to 45CSR10, §3.2.c., #4 Boiler (type "b") is allowed to emit 1.6 times the total design heat input (TDHI) through the stacks in million BTU's per hour, provided no more than 5,500 pounds per hour of sulfur dioxide is emitted from all such stacks. No. 4 Boiler is registered as having a TDHI of 581.8. Therefore, allowing 1.6 times 581.8 mmBTU/hr or 930.88 pounds per hour (lbs/hr) of SO_2 .

B. Initial Compliance Testing:

As per 45CSR10A§5.1.a., Alloy Facility conducted its initial compliance test during November 2000. Compliance testing is not required if CEMS are employed, and CEMS were installed on Boiler 4 during June 2003.

C. Recordkeeping:

The owner or operator of a fuel burning unit which utilizes CEMS is exempt from the provisions of 45 CSR 10 A § 7.1.a to maintain the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis, a periodic fuel quality analysis or a quality control/quality assurance program for fuel analysis. (45 CSR 10A,§ 7.1.c.) Alloy Facility does however keep a monthly coal analysis that includes, among other things, the sulfur content.

Alloy Facility shall submit a "CEMS Summary Report" and/or a "CEMS Excursion and Monitoring System Performance Report" to the Division of Air Quality quarterly no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A to 45 CSR 10 A (45 CSR 10A, §7.2.a.)

If during the quarterly reporting period the total duration of excursions for the calendar quarter is less than four percent (4%) of the total source operating time for the calendar quarter and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the calendar quarter, only the CEMS Summary Report shall be submitted and the CEMS Excursion and Monitoring System Performance report shall be maintained onsite to be submitted to the Division of Air Quality upon request (45 CSR 10A, §7.2.a.2)

If the total duration of excursions for the calendar quarter is four percent (4%) or greater of the total operating time for calendar quarter or the total monitoring method downtime for the calendar quarter is five percent (5%) or greater of the total operating time for the calendar quarter, the CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report shall both be submitted to the Division of Air Quality. – (45 CSR 10A, §7.2.a.3)

The CEMS Excursion and Monitoring System Performance Report shall be in a format as provided in Appendix A to 45 CSR 10 and the magnitude of each excursion, and the date and time, including starting and ending times, of each excursion; specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility; the nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted; the date and time identifying each period during which quality-controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system; and when no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report. – 45 CSR 10A, §7.2.a.4.

II. MANUFACTURING SOURCES

Alloy Facility operates electric arc furnaces (EAF) for the production of silicon metal. Sulfur dioxide emissions are generated in the EAFs Nos. 3, 6, 7, 9, 14, 15 and 16 from the use of metallurgical coal as a raw material. Actual emission testing for SO2 has been conducted on one of the furnaces, EAF 15, and based on the processes utilized and configuration of the EAFs , the SO2 testing data derived from EAF 15 is valid and representative of the other EAF units.

Applicable Standard:

No person shall cause, suffer, allow, or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations. 45 CSR 10, §4

Initial Compliance Testing:

45 CSR 10A §5.2.a. provides for an initial compliance test conducted in accordance with 40 CFR Part 60 , Appendix A , Method 6 or other equivalent EPA testing method, and the results of this initial testing are to be considered in establishing the subsequent monitoring plan . Alloy Facility has performed stack tests for SO_2 on Furnace 15, which is in accordance with 40 CFR Part 60, Appendix A, Method 6, conducted on December 15, 1998 at rates equaling 53.0 pounds per hour / 222.60 tons per year and August 25, 1999, at 54.72 pounds per hour/229.82 tons per year for an average of 53.86 pounds per hour /226.21 tons per year which translates to a concentration average of 18 ppm, only a fraction of the 45 CSR 10 §4 regulatory standard of 2000 ppm. This 18 ppm concentration is representative of the emission rate from the other EAF furnaces as well.

Based on these results Alloy Facility is requesting an exemption from any further testing.

Monitoring:

CEMS are required only if there is both the potential to emit 100 tons per year (tpy) of sulfur dioxide **and** the potential to emit sulfur dioxide at a rate greater than or equal to 90% of the applicable emission standard, which is 2,000 ppm.– 45 CSR 10A,§6.2.b.

Since testing reveals that the potential to emit from each furnace is only a fraction of the 2,000 ppm standard and metallurgical coal is the only raw material utilized in the ferroalloy furnaces with any significant sulfur content. The average sulfur content of the metallurgical coal during the emission testing of EAF 15 noted above was 0.65%. This sulfur content is consistent with historical sulfur content data which has showed a maximum of 0.74% sulfur or approximately 21 ppm SO2. Even at this maximum sulfur content, compliance with the 2000 ppm stack concentration limit is easily achieved. Based upon this margin of compliance with the 2000 ppm limit, Alloy Facility does not believe that on-going monitoring of the sulfur content of the metallurgical coal or reporting is necessary. Alloy Facility therefore requests that these requirements be waived.

The following information is presented in the context of the requirements contained at for a \$45 CSR 10A, \$6.4:

- A response plan to be implemented during excursions (45 CSR 10A, 6.4.f.)
- ¬ As stated above, the maximum historical sulfur content is 0.74% (21 ppm). Therefore, it is not possible to exceed the 2000 ppm limit and no response plan will be required.

Reporting:

Alloy Facility shall submit a "CEMS Summary Report" "to the Division of Air Quality quarterly no later than thirty (30) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A to 45 CSR 10 A (45 CSR 10A, §7.2.a.).

Since it is not possible that the 45 CSR 10 §4 standard of 2000 ppm can be violated by the electric arc furnaces, a "CEMS Excursion and Monitoring System Performance Report should not be required for these units.

Monitoring Plan - Revisions:

Alloy Facility reserves the right to periodically revise the elements of this 45 CSR 10/10A monitoring plan as circumstances in plant equipment / operations dictate. Revisions will become effective only after approval by DAQ.

January 29, 2004 Revised December 7, 2004

45 CSR 2 / 2A Testing, Monitoring, Recordkeeping and Reporting Plan:

Facility Information:

Facility Name: Alloy Facility Metals Company - Alloy, LP

Facility Address: PO Box 613 Alloy, WV 25002

Facility Contact: Roger Wagner, Manager - SHEA, 304-779-3379

In accordance with 45 CSR 2, §8.2.a, following is the proposed plan for monitoring compliance with the opacity limits set forth under 45 CSR 2, §3.

Facility Description:

Alloy Facility (SIC Codes 3313 and 4911) owns and operates a ferroalloy manufacturing plant producing silica and ferrosilica near Alloy, Fayette County, WV. Coal, silica gravel, and wood chips are brought to the plant by truck, rail and barge. These raw materials are sent to the mix building, batched and conveyed to each of the furnaces where it is reduced to silicon metal. Molten metal is tapped into large crucibles and cast into chills. After the metal hardens, it is sent to packing area for crushing, sizing, and packaging. The product is shipped directly by rail or packaged for specific customer. The coal-fired #4 Boiler generates electricity for Alloy Plant operation.

The fuel burning units are summarized in Table 1 below:

Table 1 - Fuel Burning Units at Alloy Facility Metals.

Title V	Title V (Stack)	Unit	Business	Source	DHI
ID		Description	Unit	Class	(mmBTU)
001-06	0004	#4 Boiler	Power House	Type 'b'	581.8

Visible Emission Monitoring Plan (COMS) (45 CSR 2A-6.2)

Applicable Standard: 10% opacity based on a six-minute block average. – 45 CSR 2, §3.1.

Source: Boiler #4 (001-06)

The owner or operator of a fuel burning unit(s) with a DHI of 250 mmBTU/hr or greater shall use a COMS to satisfy the requirements of an approved monitoring plan. – 45 CSR 2A-6.2.a.

COMS, if required, shall be installed, operational and certified within twelve (12) months of the date of monitoring plan approval. – 45 CSR 2A-6.2.c.

In the event the COMS system is non-operational for a period greater than 24 hours, Alloy Facility Metals at a minimum will check for visible emissions once per day, via Method 22. If visible emissions are detected then a visible emissions test in accordance with 40 CFR Part 60, Appendix A, Method 9 will be conducted.

II. 45 CSR 2 Recordkeeping and Reporting Plan

A. Operating Schedule, Quality and Quantity of Fuel Burned – The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel-burning unit. (45 CSR 2A §7.1.a)

For fuel burning unit(s) which burn only coal, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and an ash and BTU analysis for each shipment. (45 CSR 2A §7.1.a.4)

Fuel Burning Unit	Operating Schedule	Fuel Type	Fuel Quality	Fuel Quantity Record	
Boiler #4 (001-06)	Start up - Date/Time Shutdown – Date/Time	Coal	BTU and ash analysis*	Tons per month	

^{*} Steam coal BTU and ash analysis are available on a per purchased shipment basis. Shipments range from 0 to 5000 tons.

B. Records Maintenance

Records of all required monitoring data and support information shall be maintained by Alloy Facility Metals, on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous (emission) monitoring instrumentation, and copies of all required reports. (45 CSR 2A,§7.1.b.)

C. Exception Reporting

 COMS Based Monitoring "COMS Monitoring Summary Report" and/or "Excursion and COMS Monitoring System Performance Report" (45 CSR 2A, §7.2.b)

Report Type	Submission Criteria	Submission Schedule	
COMS Monitoring	Total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan	The Monitoring Summary Report shall be submitted to the Director postmarked by the thirtieth (30th) day following the end of each calendar quarter.	
Summary Report	Total number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater of the total number of readings agreed upon in the monitoring plan for the reporting period	The Monitoring Summary Report shall be submitted to the Director postmarked by the thirtieth (30th) day following the end of each calendar quarter.	
Excursion and COMS Monitoring System Performance Report	Total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan	The Excursion and Monitoring Plan Performance Report shall be maintained on-site and shall be submitted to the Director upon request.	
	Total number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater of the total number of readings agreed upon in the monitoring plan for the reporting period	The Excursion and COMS Monitoring System Performance Report shall be submitted to the Director Postmarked by the thirtieth (30th) day following the end of each calendar quarter.	

- 1. COMS Based Monitoring In accordance with the provisions of this subdivision, each owner or operator employing COMS as the method of monitoring compliance with opacity limits shall submit a ACOMS Summary Report@ and/or an AExcursion and COMS Monitoring System Performance Report@ to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The COMS Summary Report shall contain the information and be in the format shown in Appendix A unless otherwise specified by the Director. (45 CSR 2A, §7.2.b)
- 2. The Excursion and COMS Monitoring System Performance Report shall be in a format approved by the Director and shall include, but not be limited to, the following information 45 CSR 2A, §7.2.b.3:
 - The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion 45 CSR 2A, §7.2.b.3.A.
 - Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility 45 CSR 2A, §7.2.b.3.B.

- The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any) 45 CSR 2A, §7.2.b.3.C.
- The date and time identifying each period during which quality-controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system 45 CSR 2A, §7.2.b.3.D.
- When no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report 45 CSR 2A, §7.2.b.3.E.
- 3. To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45CSR2 shall be followed 45 CSR 2A, §7.2.d.
 - Alloy Facility Metals shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in subdivision 9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. Alloy Facility Metals shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information: (45-2-9.3.b)
 - 9.3.b.1. A detailed explanation of the factors involved or causes of the malfunction;
 - 9.3.b.2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 9.3.b.3. An estimate of the mass of excess emissions discharged during the malfunction period;
 - 9.3.b.4. The maximum opacity measured or observed during the malfunction;
 - 9.3.b.5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - 9.3.b.6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

Monitoring Plan - Revisions:

Alloy Facility Metals reserves the right to periodically revise the elements of this monitoring plan as circumstances in plant equipment / operations dictate. Revisions will become effective only after approval by DAQ.

III. 45 CSR 2-8.1 TESTING PLAN

A. Visible Emission Testing (45 CSR 2A 5.1.a)

(Source: Boiler No. 4 (001-06))

Alloy Facility Metals will conduct visible emission testing in accordance with COMS.

B. Weight Emission Testing (45 CSR 2A 5.2.a)

(Source: Boiler No. 4 (001-06))

Alloy Facility will conduct weight emissions testing within 24 months of the last previous test.

APPENDIX B

CAIR Permit Application



MAR - 9 2007

CAIR Permit Application

Page 1

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

	_				
STEP 1 Identify the source by plant name, and ORIS or facility code	This submission is: New Revised WV Alloys, Inc. Plant Name Old-00001 West Virginia ID Number				50012 ORIS/Facility Code
STEP 2	Unit ID#		NO _x Annual	NO _x Ozone Season	SO ₂ Annual
Enter the unit ID# for each CAIR unit and indicate to which	BLR4			X	
CAIR programs each unit is subject (by					
placing an "X" in the column)	-	· - · - · - · · - · · · · · · · · · · ·			
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STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

- (1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:
- (i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and (ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review

a CAIR permit application and issue or deny a CAIR permit.

- (2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.
- (3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR NO_X source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) and such CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit (as applicable).

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STEP 3, continued

(b) Monitoring, reporting and recordkeeping requirements.

- (1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).
- (2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable)

(c) Nitrogen oxides annual emissions requirements.

- (1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_X Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.
- (2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.
- (3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

 (4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking
- System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.
- (5) A CAIR NO, Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO. Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR NO_x Annual allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, $transfer, or deduction of a CAIR NO_{X} Annual allowance to or from a CAIR NO_{X} Annual source's compliance account is incorporated account to the compliance account to the co$ automatically in any CAIR permit of the source.

- (d) <u>Nitrogen oxides ozone season emissions requirements.</u>

 (1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO. Ozone Season source and each CAIR NO. Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_x Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.
- (2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a,
- 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

 (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

 (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone
- Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
 (7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

- (e) <u>Sulfur dioxide annual emission requirements.</u>

 (1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO2 allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for
- the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

 (2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO2 allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51through 62, and 80 through 88 of 45CSR41.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO2 allowance to or from a CAIR SO2 source's compliance account is incorporated automatically in any CAIR permit of the source.

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STEP 3. continued

(f) Excess emissions requirements.

(1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:

- (i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.
- (2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:
- (i) The owners and operators of the source and each CAIR NO $_{
 m x}$ Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR§40-54.4 a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

- (3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:
- (i) The owners and operators of the source and each CAIR SO2 unit at the source shall surrender the CAIR SO2 allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.
- (i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR
- NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable)
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO, Trading Program (as applicable).
- (2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NÔ_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) or the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO $_{\rm x}$ Annual units, CAIR NO $_{\rm x}$ Ozone Season units or CAIR SO, units (as applicable) at the source

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NÔ_x Annual unit, CAIR NÔ_x Ozone Season ûnit or CAIR SO₂ unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

	Plant Name WV Alloys, Inc.	CAIR Permit Application Page 4
STEP 3, continued	Certification	
	I am authorized to make this submission on behalf of the owners and operators of the source made. I certify under penalty of law that I have personally examined, and am familiar with, the in this document and all its attachments. Based on my inquiry of those individuals with prinformation, I certify that the statements and information are to the best of my knowledge and I am aware that there are significant penalties for submitting false statements and information information, including the possibility of fine or imprisonment.	statements and information submitted imary responsibility for obtaining the d belief true, accurate, and complete.
	CAIR Designated Representative W. R. Wann I	
	Signature W L Warms Date	3-7-07